

Picture Window Pro 8.0 Update Log

27-Apr-2025 – Picture Window 8.0.497

Mask: fixed problem with Save Current Mask command (from settings menu) causing corruption of the current mask.

Clone Tool: when cloning from one image to another, either click or shift-click can be used to set the source point.

26-Apr-2025 – Picture Window 8.0.496

Fixed problem causing crash when sharpening from Raw Develop or Adjust transformation. This was accidentally introduced when adding a feature to multipass sharpen on 18-Feb.

25-Apr-2025 – Picture Window 8.0.495

Added a new Channel Mixer transformation. After reading an article about the Foveon image sensor which apparently has significant crosstalk between its red, green and blue channels and I wanted to simulate what this looked like.

Favorites: The first 9 buttons can now be selected by pressing a number key. You can now optionally rearrange the button order manually – see the help file for details.

17-Apr-2025 – Picture Window 8.0.494

File Export command now remembers the last custom folder setting.

Updated to ExifTool 13.27.

13-Apr-2025 – Picture Window 8.0.493

Various transformations with previews within the dialog box: The 2X button that switches the preview to 200% is now a toggle instead of a temporary change.

Export: added an Orientation setting to optionally rotate exported image to landscape or portrait orientation.

Measure Tool: control points are now numbered and if you press the corresponding number key, the display recenters on the corresponding control point. Additional key presses zoom in further.

5-Apr-2025 – Picture Window 8.0.492

Printing: fixed issues with incorrect scaling when Scale to Custom Width or Height was selected.

Zoom Blur: added options to zoom in and out, out, or in.

30-Mar-2025 – Picture Window 8.0.491

Color Picker: fixed issues with entering RGB values manually in some cases not updating.

Drop Shadow Transformation: fixed problem with shadow mask not being recalculated after loading a settings file.

Updated to ExifTool 13.25.

21-Mar-2025 – Picture Window 8.0.490

Crop: added the ability to store up to four custom proportions and recall them via a drop-down menu. See the help file for details.

19-Mar-2025 – Picture Window 8.0.489

Level: switching between horizontal and vertical now preserves the angle setting.

Batch: aborting a batch process now leaves the current file in the file list set to the last image successfully processed.

Fixed problem causing crash when adjusting the separator between the image browser and the main image area in certain cases.

Holding the Alt key down while switching between an input image and an auxiliary input image for the same transformation now preserves the zoom and scroll information (assuming the two images are the same size).

13-Mar-2025 – Picture Window 8.0.488

Palette Tool: if Display Palette in Main Image Area is checked, the on-screen palette now allows extra space for scroll bars.

Export: Added two new options to the Folder setting – Original Subfolder and Ask. Original Subfolder lets you specify the export folder as a subfolder of the original folder. If you select Ask, Picture Window asks you for a folder to export to at the beginning of a batch process (or every time if not in a batch process). See the updated help file or Transformations.pdf for more details.

The File Overwrite dialog box that warns you when you are about to save over an existing file can now be resized horizontally to accommodate wider pathnames.

Batch: you can now run a batch job on a single file.

4-Mar-2025 – Picture Window 8.0.487

Speck Removal Tool: fixed problem causing a crash when reducing the speck radius using the mouse wheel in some cases.

In batch mode, at most one alert, error or message dialog box of any kind is now displayed. Subsequent messages are treated as though you clicked OK. Error and Alert messages still make an audible beep (unless silenced in Preferences).

Crop: fixed issue with reset crop box in batch.

Levels & Color: fixed problem with auto white balance and auto dynamic range in some cases.

Size to Fit: added Autorotate checkbox and fixed several minor issues.

21-Feb-2025 – Picture Window 8.0.486

Resizing the Histogram Mode window now works more smoothly, especially for 2-D histograms.

Updated Multipass Sharpen.pdf to give more details on and examples of 2-pass sharpening. A Two Pass.multipass sharpen file is now installed with Picture Window to supply suggested default settings for 2-pass sharpening.

18-Feb-2025 – Picture Window 8.0.485

Equalize transformation: dialog box can now be resized vertically as well as horizontally.

Primaries transformation: added a Dynamic Range slider so you can prevent clipping.

Multipass Sharpen: added a Dynamic Range slider so you can prevent clipping. Also optimized resizing the dialog box so the preview does not recompute until you finish resizing.

When reloading scripts saved without image names, you no longer get a warning about missing files when opening the script.

In transformation dialog boxes that have a vertical separator bar (Advanced Sharpen, Color Balance, Denoise, Frame, Gaussian Blur, High Pass, Layout, Linear Blur, Multipass Sharpen, Precise Gaussian Blur, Unsharp Mask, Watercolor), there is now a diamond in the center of the separator bar you can use to drag it, similar to the vertical separator between the image browser and the main image area. This avoids problems adjusting controls near the separator bar.

Fixed problems with dynamic range sliders being truncated vertically in some cases.

16-Feb-2025 – Picture Window 8.0.484

Crop transformation: fixed problems with mask overlays.

15-Feb-2025 – Picture Window 8.0.483

Tint transformation: added a Reference Image setting. If you specify a color reference image, it is used to define the color line by setting its color at each of 17 brightness levels to the average color of the pixels of that brightness in the reference image. See the help file or Transformations.pdf for an example of how you can use this to transfer some of the feel of the reference image to the input image.

Crop transformation: add an optional overlay on the input image that highlights the area outside of the cropping rectangle. You can adjust the transparency and color of the overlay, similar to mask overlays. If you don't want an overlay, set the transparency to 100% and it will work as before.

11-Feb-2025 – Picture Window 8.0.482

Equalize: made the output curve control (which is read-only) still respond to various display options (grid, histogram expand, histogram smoothing).

The Ctrl-D keyboard shortcut now finalizes the mask if a mask operation is pending, before toggling the display.

Mask "Update transformation with mask" (from the Mask Settings Menu) is now saved and restored as part of the mask settings. Previously it was cleared every time. Now, with this setting enabled, the Apply button is never displayed since masks are automatically finalized with each change. Previously it was still being displayed even

though the mask was already finalized. If you want this option to be the default, you can configure the Mask dialog as you want it and use the Mask Settings Menu to save as default mask settings.

Updated to Icms 2.17 color management system.

9-Feb-2025 – Picture Window 8.0.481

Mask: fixed problems with undoing flood fill operations in some cases.

Curves: added autorange threshold options to the settings menu.

7-Feb-2025 – Picture Window 8.0.480

Image Browser: double clicking on a mask half-size thumbnail now opens the transformation (if necessary) and then opens the corresponding mask.

Show Dependencies: mask dependencies now include the mask name following the transformation caption.

5-Feb-2025 – Picture Window 8.0.479

Added "Add Snippet After..." to the Branch context menu.

Fixed problem causing script names not to be added to the recently open file list.

3-Feb-2025 – Picture Window 8.0.478

Add new Blur Tool similar to the one in PWP 7 – see updated help file or Transformations.pdf for details. The new tool has a Blur Radius setting and also avoids blurring data from areas of the image that are masked out (similar to Precise Gaussian).

Updated ExifTool to version 13.18.

Updated to LibRaw 0.21.3.

1-Feb-2025 – Picture Window 8.0.477

Added code to prevent Picture Window main window from starting up minimized.

Levels and Color Tool: fixed several problems causing settings to be incorrectly restored when re-opening the transformation. Added option to alter brightness using a curve instead of Midtone/Contrast/Dynamic Range sliders. Added button to base curve histogram on entire image or just the area covered by the Amount mask.

Levels and Color Transformation: Added option to alter brightness using a curve instead of Midtone/Contrast/Dynamic Range sliders. Added button to base curve histogram on entire image or just the area covered by the Amount mask.

16-Jan-2025 – Picture Window 8.0.476

Image Info: GPS metadata is now accessed using ExifTool which can locate the information even if it is not in the normal EXIF metadata. The display format has been changed to decimal degrees and altitude is now always in meters.

Mask: fixed some issues with Mask Undo.

14-Jan-2025 – Picture Window 8.0.475

Warp: the state of the tool bar that constrains control point movement horizontally or vertically is now preserved when you close and then re-open the transformation dialog box.

In Transformation submenu, File is now called Batch.

Dehalo: refined the dehalo algorithm.

When saving or exporting raw files, the raw file extension is now stripped off for all common raw file types.

Mask: after finalizing a gradient tool (linear or oval), the freehand lasso tool is now selected. Some issues with Mask Undo still remain and will be fixed in a future release.

Slide Show Viewer: fixed problems with dropping a folder that contains no image files onto the Slide Show Viewer icon.

Geotag Folder: fixed problem with default folder setting not restored correctly.

29-Dec-2024 – Picture Window 8.0.474

Raw Develop: fixed problem with not recognizing certain lenses based on the lens mount.

Monochrome: fixed problem with Hue Curve too tall.

Added a new masking tool based on hue difference. See the help file and [Creating and Using Masks.pdf](#) for details.

Removed some unnecessary updates of edit controls.

24-Dec-2024 – Picture Window 8.0.473

Updated to ExifTool 13.10.

Changed the way metadata is extracted from files to work via ExifTool since some cameras store certain information inside a proprietary maker note instead of using standard tags. This change lets Image Info retrieve otherwise unavailable camera and lens information and also lets Raw Develop process raw files from more camera/lens combinations.

21-Dec-2024 – Picture Window 8.0.472

Raw Develop: fixed issues with not recognizing certain camera bodies which were identified by both make and model.

20-Dec-2024 – Picture Window 8.0.471

Image Info: changed from a modal to a modeless dialog box so the rest of the user interface remains active while it is being displayed. In addition, changing the current image updates the image info to match the new image.

Raw Develop: fixed problem with not recognizing lenses with crop factors other than 1 in some cases. Also added camera profiles for Fujifilm X-T2 thru X-T5.

16-Dec-2024 – Picture Window 8.0.470

Mask: fixed issues with certain settings (e.g. Mask Paint tool) not being restored correctly after an undo.

Print command and transformation: fixed problems with auto orientation in some cases when the cropping rectangle did not cover the entire image. Added two more scale options: scale to custom width and scale to custom height. These options fix the width or height and adjust the other dimension according to the proportions of the cropping rectangle. Note that width and height refer to the (possibly) rotated image on the page.

Changed the icon in the image browser for copying selected transformations to make it different from the copy to clipboard icon at the top of the screen. A full install is required to get the new bitmap.

The yellow check marks indicating transformations are selected are now cleared when you select anything (either command or transformation) from the main menu (or click a button that indirectly activates an item in the main menu). Hopefully this will reduce the annoyance of forgetting transformations are selected when trying to make a new selection.

Favorites: added a Settings Menu to let you keep the window open after selecting a transformation. Also, the position of the window is now preserved across sessions.

13-Dec-2024 – Picture Window 8.0.469

Raw Develop transformation: Reworked the way lens profiles work. Picture Window now includes a copy of the LensFun database which provides information about many different lenses and camera bodies. Using this open source database you can apply distortion, vignetting and chromatic aberration corrections to raw files. While not definitive, the database is updated from time to time with new cameras and lenses. The command to create lens profiles has been removed from the File menu and old lens profiles are no longer supported. Before using the Raw Develop transformation, it is recommended that you delete the prior contents of your Lens Profiles folder, normally located at the following location: Documents\Picture Window Pro\Lens Profiles.

Selective Color Correction: adjusted the controls to reduce the minimum dialog box size.

Image Browser: there are now 2 buttons for show/hide thumbnails. If no images are selected, they show or hide all thumbnails. If any images are selected, only the selected ones are affected. This lets you show or hide individual thumbnails.

17-Nov-2024 – Picture Window 8.0.468

Fixed overflow problems when applying 16-bit masks to 16-bit images.

Updated to ExifTool 13.03.

16-Nov-2024 – Picture Window 8.0.467

Process or Skip now works with multiple batch.

Fixed problems zooming and scrolling the Preview window.

13-Nov-2024 – Picture Window 8.0.466

Moved the Disable Breakpoints checkbox to the Batch Progress window so it is active during breakpoints.

Process or Skip no longer leaves the File Open transformation dialog box open. It also adjusts the image browser to display the current image. Removed Terminate Batch and Disable Breakpoints controls from Process or Skip dialog box as these are redundant with the controls in the Batch Progress window. The main image area is now active while the Process or Skip dialog box is displayed so you can zoom or scroll the image normally. The main menu and image browser are disabled however.

Breakpoints are no longer allowed on transformations that have no settings (e.g. Process or Skip and certain test patterns).

Slide Show transformation: added support to left and right arrow and escape keys. Slide show no longer terminates at the end – you need to shut it down manually by clicking anywhere on the screen or pressing Esc.

11-Nov-2024 – Picture Window 8.0.465

Fixed problems with keyboard accelerators not working in batch mode.

Continued reworking how batch processing works. Removed single step mode and added a new Process or Skip transformation you can add to provide the functionality of single step mode. Added a new Edit command to disable/enable breakpoints. Modified the Copy transformation to let you quickly switch among up to four inputs. This can also be used within a batch process to provide additional manual control of the processing workflow. See the updated help file and Batch Processing.pdf for details.

Hovering the cursor over an Image Select control thumbnail now displays the name of the associated image, if any.

7-Nov-2024 – Picture Window 8.0.464

There are two batch modes – automatic and single step. In automatic mode, a batch progress dialog box is displayed as before, although it is now resizable. Clicking the Terminate Batch button interrupts the batch process. In single step mode, a modal dialog box is displayed instead of the batch progress window. The main image area now displays the current image. The dialog box has buttons to let you advance forward or backward in the file list, process just the current image, or terminate the batch operation. Fixed a problem causing breakpoints to be skipped over in some cases and made a number of other minor improvements, fixes. The help topics related to Batch have been extensively rewritten and also the downloadable file Batch Processing.pdf.

Multiple Batch has not been updated yet and only supports automatic batch mode.

31-Oct-2024 – Picture Window 8.0.463

Fixed problems with Batch test mode with breakpoints and File Export.

31-Oct-2024 – Picture Window 8.0.462

Color Picker: fixed problems with scroll bar in Filter Pack mode when window is resized much larger.

The Batch test mode dialog box now has five options: process, skip, go back, terminate or process all remaining. Previously there was only process or skip. Fixed problems with location of red dot not being updated during batch process and red dot not always being returned to its initial location at end of batch process.

29-Oct-2024 – Picture Window 8.0.461

When running a File Open transformation with more than one pathname, Picture Window now checks all the selected files in the list and offers to de-select any that do not exist before continuing. This avoids multiple missing file error messages when processing the batch operation.

Mirror/Rotate transformation: added batch reset to Settings menu.

File/Preferences: rearranged the controls into 2 columns so the dialog box fits better on low-resolution screens.

28-Oct-2024 – Picture Window 8.0.460

Mask Flood Fill: fixed problems with Ctrl-Shift Click with no pending flood fill operation. This now is treated the same as a regular click.

Batch: fixed problems with edits to transformations at breakpoints being discarded. Also fixed problems with closing Picture Window while a batch job was still open.

26-Oct-2024 – Picture Window 8.0.459

Crop transformation: fixed problem with Reset Cropping Rectangle in Batch Mode setting.

Level transformation: added item to Settings Menu to reset the level line on startup during batch operations, similar to the Crop transformation.

File Save As command: fixed problem with saving files that have no original pathname.

25-Oct-2024 – Picture Window 8.0.458

You can now override the default names of masks to help identify what the mask does. To assign a caption to a mask, right-click on the Amount mask box and enter the desired text (up to 255 characters). To revert to the default mask caption, clear the caption text. Also, when masks are listed in the candidate mask menu you get by right-clicking an Amount mask box, they are now listed by caption instead of by mask number.

Lines, Arrows, Text Tool: added to ability to place the text box at the beginning, end or middle of the line.

22-Oct-2024 – Picture Window 8.0.457

Fixed installation issue for ExifTool 12.99.

21-Oct-2024 – Picture Window 8.0.456

The installer no longer places a copy of Alt_menu_acceleration_disabler.exe in the Windows Startup folder. Instead, it is now automatically launched (unless it is already running) by Picture Window when it starts up.

Updated to ExifTool 12.99.

Dragging the separator line between the image browser and the main image area no longer closes the current Mask window, if any.

19-Oct-2024 – Picture Window 8.0.455

Added support for Nik 7 plug-ins and DxO FilmPack 7 plug-in.

Mask Flood Fill Tool: fixed problem with mask being restored incorrectly when re-opened.

16-Oct-2024 – Picture Window 8.0.454

Flood Fill Mask Tool: fixed problem with Ctrl-Shift click to start a new flood fill operation. Also fixed problem with Undo of flood fill operation in some cases. Added error checks to prevent crash for illegal seed points.

Mask Paint Tool: fixed problem with certain mask paint operations not working correctly when creating 16-bit masks.

Quotes are now stripped from replacement pathnames when file is missing when loading a script.

Expand Dynamic Range: fixed problem causing black output image in some cases.

Added dithering of low order bits in masks when converting from 8-bit to 16-bit image data.

6-Oct-2024 – Picture Window 8.0.453

Speck Removal Tool: improved performance of Patch Match method, especially for larger radius settings.

Mask Tool: fixed several problems related to Mask Undo.

Flood Fill Mask Tool: Added the ability to create either a seed point as before or a seed line. If you create a seed line, the flood fill starts at the seed point located at the beginning of the line and expands to all adjacent pixels whose color is within the threshold of any color in the input image on the line. This can be useful, especially if the area to be selected has a smooth gradient or consists of a few specific colors. Click defines the seed point as before, Shift-Click now defines the other end of the seed line. Ctrl-Click returns to a single seed point. Ctrl-Shift-Click (formerly Shift-Click) applies the current flood fill and starts a new one. See the help file or [Creating and Using Masks.pdf](#) for more details.

Updated to ExifTool 12.97.

2-Oct-2024 – Picture Window 8.0.452

Crop transformation: fixed several problems related to rotated crop boxes. When the crop box is rotated, the margin readouts now become read-only and indicate the margins for the bounding box containing the rotated crop box.

30-Sep-2024 – Picture Window 8.0.451

Mask Dialog Box: fixed problems with crash on Redo in some cases.

Fixed problems with mouse wheel not zooming when a transformation was active and just the input image was being displayed.

Added new Notecard transformation (under Geometry). See help file or Transformations.pdf for details.

23-Sep-2024 – Picture Window 8.0.450

Image Browser: fixed problem with certain tool bar buttons being grayed out incorrectly after a selection operation.

Expand Dynamic Range: fixed bug causing slightly incorrect results for 24- and 48-bit color images using Exposure Fusion method and the Contrast slider. Fixed problem of very slow response when using Exposure Fusion in a batch job.

17-Sep-2024 – Picture Window 8.0.449

Minor changes to ensure that when a new Mask dialog box is displayed, the images are zoomed to fit.

Warp transformation: holding down Shift no longer constrains control points to move horizontally or vertically. Now there is a tool bar in the upper right corner to perform this function.

15-Sep-2024 – Picture Window 8.0.448

When running a script or a batch process and the dialog box comes up on a File Open asking what you want to do about a profile mismatch, if you do nothing for 30 seconds, it now assumes you want to convert to the working color space and continues. This facilitates unattended operation, but if you need to intervene manually to control the profile conversion, you still have 30 seconds to do so.

Crop transformation: added a button to let you shrink and offset a rotated crop box as necessary to make the entire box fit within the input image. Also, if the crop box is rotated, you can now drag it freely – previously its motion was limited.

31-Aug-2024 – Picture Window 8.0.447

Image Info: added image proportions readout.

File/Re-Save command: fixed problems when the image was previously saved as a different file type from the original file (e.g. a file was opened as a JPEG and saved as a TIFF). Re-Save now proposes to save as TIFF – previously it tried to save as JPEG.

26-Aug-2024 – Picture Window 8.0.446

Rotate-Mirror Transformation: added Un-Rotate and Re-Rotate items to the Settings Menu. Un-Rotate changes the image orientation back to level with no reflection. To rotate it back, select Re-Rotate. This can be useful in batch operations for speck removal or cloning that is independent of whether the camera was in portrait or landscape orientation.

Image Info: added image size in megapixels to the size readout.

24-Aug-2024 – Picture Window 8.0.445

Speck Removal Tool: added a tool bar to let you rotate all the speck points 90 degrees counter-clockwise or clockwise. Also fixed problem with Patch Match method choosing the wrong patch to substitute in some cases.

9-Aug-2024 – Picture Window 8.0.444

Renamed new exiftool.exe to exif_tool.exe to avoid problems with installer when re-installing over PWP 8.0.442 or earlier. A full install is required to get the new file.

5-Aug-2024 – Picture Window 8.0.443

Made some minor changes to hopefully eliminate error – missing exiftool.exe.

3-Aug-2024 – Picture Window 8.0.442

Monochrome Transformation: added a Change control to Hue Curve conversion method. This lets you make the brightness change either proportional to the saturation of the color being changed or not.

Fixed problem with scrolling via mouse wheel when current image was bypassed (or a splitter or side branch).

For top-level transformations other than File Open, you can now assign a default File Save pathname and file type. When saving images downstream from the top-level transformation (such as Paste or File/New), this default pathname and file type will be assumed and the filename assigned a version number, similar to what happens if the top-level transformation is a File Open. To access this command, right click on the thumbnail of the top-level transformation and select the command from the File submenu to either set or clear the default File Save pathname. These two commands only appear in the File submenu for top-level transformations other than File Open. When entering a pathname, leave off the filename extension as this is automatically added based on the file type.

Updated to latest LibRaw.dll – the library used by PWP to read Raw files.

Updated ExifTool to version 12.92.

23-Jul-2024 – Picture Window 8.0.441

Layout Transformation: fixed problem with Fill Panel setting being ignored in some cases.

Added a setting to File Preferences for Clipboard – this lets you copy images to the clipboard in DIB V1 format only or in both DIB V1 and DIB V5. Copying as DIB V5 causes compatibility problems with some other applications but preserves the color profile of the image.

Created a new document with an associated example download: Black and White Processing.pdf and Black and White Processing.zip. This document discusses some techniques for processing and printing black and white images using Picture Window.

17-Jul-2024 – Picture Window 8.0.440

Curve Control: Fixed tool tip for Y coordinate probe.

Fixed problem in File Open causing crash when doing Batch operations if there are no files to execute. Tool bar buttons for batch operations are now grayed out if there are less than 2 files in the list.

Added warning when starting a batch operation if none of the transformations downstream from the File Open is an Export, Print or Slide Show.

30-Jun-2024 – Picture Window 8.0.439

Fixed problem with probes not being bounds checked against the top edge of the image.

Fixed problem with closing bypassed transformations in certain cases triggering a recalc unnecessarily.

27-Jun-2024 – Picture Window 8.0.438

Fixed problem after editing a transformation and propagating changes to downstream transformations causing in some cases updated downstream images to be displayed in split screen or not zoomed to fit.

19-Jun-2024 – Picture Window 8.0.437

Fixed problems with probing on-screen palette colors.

Card to Folder command no longer copies empty folders from the card – it still erases them however when the copy is finished.

15-Jun-2024 – Picture Window 8.0.436

Updated to Exiftool version 12.87.

Fixed problems with probe in Histogram tool when a transformation is open.

Fixed problems with probing Hue curves.

14-Jun-2024 – Picture Window 8.0.435

Curve Controls: You can now double-click on a control point to display a dialog box that lets you set the x- and y-coordinates of the control point either by entering a numeric value or using a probe.

The Histogram Tool probe is no longer active when a transformation is open and you click on the input image.

8-Jun-2024 – Picture Window 8.0.434

Help About box: added information on Memory Load. If this number gets near 100% you are running out of physical memory.

Palette Tool: added a checkbox to let you display a copy of the palette color patches in the lower right corner of the main image area. For many transformations and controls, you can click or shift-click on one of these color patches and the effect will be the same as if you clicked or shift-clicked on that color in the image. You can use this feature, for

example, to create new control points on curves or to set control points for selective color correction.

2-Jun-2024 – Picture Window 8.0.433

Warp Transformation: fixed problem with Batch Reset flag not being saved correctly in command lines so the setting was not correctly restored when editing or executing the transformation. Fixed small error in computation of output image size and area.

Crop Transformation: fixed inconsistency between the Reset Crop Box to Entire Image command in the right-click menu and the tool bar button with the same function. Fixed problem of crop box overlay not being erased correctly when only the input image was being displayed.

Added the F5 keyboard shortcut to simulate selecting Reset from the Settings Menu for the currently open transformation dialog box, if any.

Fixed problems with zooming and scrolling the main image area when a transformation was in progress, the preview image was being displayed by itself and an auxiliary input image was selected.

Clone Tool: fixed problem with Undo not resetting the Source Image control correctly.

16-May-2024 – Picture Window 8.0.432

Warp Transformation: fixed problem with crashing during a recalc or script.

16-May-2024 – Picture Window 8.0.431

Stereo Transformation: fixed problem with Swap Images checkbox not working.

Warp Transformation: Auto Proportions can now be applied continuously rather than just when you click a button.

Autorange Transformation: You can now opt to exclude pixels from the black and white point computation by setting an Amount mask.

14-May-2024 – Picture Window 8.0.430

Added an experimental group of three transformations under the Transformation/Split command from the main menu. For details, see the new document **Split Processing.pdf** which can be downloaded from the web site. These transformations may not work perfectly or may change significantly in the future or disappear, so please don't use them for production work on your images.

Scratch Removal Tool: fixed problems with simultaneously dragging and rotating the mouse wheel. Rotating the mouse wheel is now ignored while dragging a control point.

Fixed problem with reading GPS latitude from JPEG files due to bug in Windows JPEG reader.

30-Apr-2024 – Picture Window 8.0.429

Fixed several problems in the dialog box that offers to replace a missing file when opening a script.

28-Apr-2024 – Picture Window 8.0.428

Mask Dialog Box: fixed problem of some controls not being hidden when doing a Reset from the Mask Settings Menu. Fixed problems with Mask Separate Tool, especially for black and white images. Fixed problems with referencing bypassed masks (e.g. a transformation refers to a blurred version of a mask image generated by the Masks transformation and then the blur transformation is bypassed.)

When offering to replace a missing file when opening a script, if you select the Edit Pathname option, you can now enclose the pathname in quotes which will then be removed and ignored. A new option to specify a replacement folder has also been added.

File Open: fixed some problems with double clicking on a File Open that had no files selected. Renamed File Open Multiple to File Open List.

Fixed problems locating Perspective Efix 6 plugin.

22-Mar-2024 – Picture Window 8.0.427

Composite transformation: fixed problem of In/Ov tool bar not being displayed in some unusual cases.

Mask: removed two of the options in the Settings Menu for initial display (Output Image Only and No Change).

Batch operations: fixed problem of error messages being hidden by the batch progress dialog box in some cases.

17-Mar-2024 – Picture Window 8.0.426

Fixed problems with probes initiated from the main tool bar (Magnifier, Readout, etc.) accidentally introduced in 8.0.424.

15-Mar-2024 – Picture Window 8.0.425

Fixed problem with certain probes accidentally introduced in 8.0.424.

15-Mar-2024 – Picture Window 8.0.424

Fixed problems with Ctrl-D not correctly updating certain transformations that accept auxiliary inputs.

Fixed several problems with control of the cursor when switching display modes.

Monochrome transformation: fixed several user interface issues.

11-Mar-2024 – Picture Window 8.0.423

Batch Operations: when paused at a breakpoint, making changes to the settings and then clicking Cancel and restoring the original settings lets the batch operation continue normally. Otherwise, canceling terminates the batch process.

Fixed problems with zooming images using the mouse scroll wheel in some cases.

Test pattern transformations: output images are now created in the working color space (or gray working color space for B&W images).

Composite transformation: the menu you get when right-clicking on the input or overlay image now lets you copy the locations of the alignment points to the other image. If the two images are about the same size and are approximately aligned to begin with, this lets you place alignment points in one image and then copy them to the other image, quickly giving you a starting point for further refinement.

Canceling the recalculation of certain transformations that can take a long time to execute now displays a dialog box to either set the output image to Error which then propagates to any downstream transformations. Or, you can bypass the transformation which will cause it to be ignored until you un-bypass it later.

8-Mar-2024 – Picture Window 8.0.422

Compare Transformation: rearranged controls to eliminate duplicate Image B label.

When a transformation is open and you switch between split screen and non-split screen display, the image is now always zoomed to fit unless you hold down the Alt key when switching.

Mask Tool: fixed problem with freehand tool being clipped incorrectly at the top and right edge of the input image.

29-Feb-2024 – Picture Window 8.0.421

Increased the number of situations in which the workspace is autosaved. This means that in the event of a crash you are likely to be able to recover more of your work.

Resize Transformation: now reports old and new size in megapixels and added the option to set the image size in megapixels.

Export command and transformation: added option to set image size in megapixels.

Histogram Tool: if a transformation dialog box is open and just the input image is being displayed, the histogram is computed from the input image. Otherwise, the histogram is computed from the output image. This lets you compare the transformation's input and output histograms by using the display tool bar, the Ctrl-D keyboard shortcut or by Shift-clicking on the Amount control mask box to toggle between the input and output image.

Text Transformation: add Location and Border Width controls to let you place captions on images that have a border. This can be used to automatically center the text in the top or bottom image border.

24-Feb-2024 – Picture Window 8.0.420

Clone Tool: Undo now resets the cursors.

Reworked the Readout Tool to show colors from both the input and output images when a transformation dialog box is open and synchronized scrolling is enabled. Also reorganized the user interface.

30-Jan-2024 – Picture Window 8.0.419

In the interest of creating a stable release, I have temporarily removed a feature added 13-Oct-2023 that allowed toggling between zoom to fit and zoom to 1:1 to preserve the zoom and scroll position of the 1:1 view.

Card to Folder: if Merge folders is not checked but all the images on the card are contained in one folder, this scenario is now treated as though Merge folders was checked, thus preventing the creation of an unnecessary Folder 1.

Clone: when selecting a new source image and switching to a split screen display, both the source image and the output image are now zoomed to fit.

29-Jan-2024 – Picture Window 8.0.418

Mask: fixed problem with incorrectly drawn overlay in some cases.

28-Jan-2024 – Picture Window 8.0.417

When a transformation is active and you use the tool bar to select whether to display the input image, the preview image, or both side by side, you now have the option of holding down the Alt key when you click on the tool bar. If the Alt key is not depressed, Picture Window does a zoom to fit when switching side-by-side display on or off. If the Alt key is depressed, the current zoom factor is preserved.

Adjust transformation: added commands to reset the settings in each of the four tabs without affecting the other settings.

25-Jan-2024 – Picture Window 8.0.416

Fixed a problem with toggling between Zoom to 1:1 and Zoom to Fit within some transformations.

Dehaze: made strength = 0.0 leave input image unchanged.

Card to Folder command: added the option to merge or not merge image folders. See the updated help file for examples of why you would not want to merge folders.

Advanced Sharpen: when showing the difference between the preview and the input image, now what is displayed is preview minus input instead of input minus preview.

Decommissioned the Android version of DoF – unfortunately Google kept making changes to Android that broke the app and it was getting to be too much work to keep updating it. The Windows version is still active.

22-Jan-2024 – Picture Window 8.0.415

Added a new Operation setting to the Blend and Composite transformations called Increase Difference. If this operation is selected, the output image is computed such that it is lighter where the input image is lighter than the overlay image and darker where the input image is darker than the overlay image. This operation can, for example, be used to sharpen the input image if the overlay image is a blurred version of the input image.

Masks: for linear and oval gradients, numbered intermediate control points are now displayed and can be dragged corresponding to intermediate control points in the color line.

Fixed problem with zooming a splitter or side branch to 1:1.

20-Jan-2024 – Picture Window 8.0.414

Dehaze transformation: added the ability to add haze as well as remove it and an exposure compensation slider to adjust the brightness of the output image.

Multipoint Gradient transformation: adding a new control point if Match Input Image is unchecked now assigns it the same color as the previous control point. Fixed problems with all the interpolation methods except Shepard and made the method list match the one in Composite Multi-point alignment. This involved removing Hardy and adding Thin Plate, Inverse Multi-quadratic, and Sinc.

Batch operations: fixed problem with scripts generated by File Export transformation. Also fixed a problem with the first image not being restored correctly at the end of a batch process.

Mask Control: added the ability to create rotated rectangle or ovals. Fixed problem with dragging oval gradients by their center point.

Color Lookup transformation: moved load/save/create cube file commands from Settings menu to a tool bar. Added an amount control. Fixed some minor issues.

Color Primaries transformation: fixed a problem with new settings not being applied after loading a saved settings file. A new settings file: Warming.primaries is now included with the install – these settings work well for bringing out fall foliage.

12-Jan-2024 – Picture Window 8.0.413

All transformations that support the Vivid Light blend mode: fixed possible crash when using Vivid Light.

Fixed problems with Amount control not properly returning control to the current transformation dialog box in some cases.

6-Jan-2024 – Picture Window 8.0.411

Magnify transformation: add Square and Diamond shape options.

Lens Distortion: the 5 control points in the overlay that define a line are now numbered and you can quickly scroll to one of them by typing its number.

Composite: re-implemented Multi-point alignment similar to the way it was implemented in PWP 7. Changed the way you specify how control points are dragged since Shift and Ctrl are used to insert and remove control points in multi-point alignment mode. A full install is required to get 3 new bitmaps.

Updated to ExifTool version 12.72.

Added support for Nik 6 Plug-ins.

30-Dec-2023 – Picture Window 8.0.410

Show Dependencies: added a Back button and made other cosmetic changes to the user interface. A full install is required to get some updated bitmaps.

Added new Magnify transformation – similar to Stretch but radial instead of horizontal or vertical. See the updated help file or Transformations.pdf for details.

26-Dec-2023 – Picture Window 8.0.409

Show Dependencies: reworked this command. See the updated help file for details.

Paint tool: added Add and Subtract modes. Subtract mode works well for painting out flare light and raindrops.

Updated LibRaw to Version 0.21.2.

Updated ExifTool to 12.71.

21-Dec-2023 – Picture Window 8.0.408

Crop transformation: fixed a problem with proportion changes not happening in certain cases. Also, changing proportions or orientation now maximizes the crop rectangle.

Added new Show Dependencies command to the Edit submenu in the main menu (also accessible by right clicking on a thumbnail in the image browser). This lets you select (display as yellow check marks in the thumbnail caption), various transformations depending on their relationship to the current transformation. You can select upstream (transformations the current transformation depends on) and/or downstream (transformations that depend on the current transformation). In addition, you can select transformations that depend via auxiliary inputs or via masks. This selects just the transformations that have a first level dependency – not those that are more than one level removed from the current transformation. You can use this, for example, to show which transformations use the current transformation as an auxiliary input (upstream/input), or which transformations depend on one of the masks in the current transformation (downstream/mask). For details, see the updated help file.

17-Dec-2023 – Picture Window 8.0.407

The left and right arrow keys now attempt to preserve the current zoom factor and scroll position when switching between multiple selected images. This only works properly if all the selected images have the same dimensions in pixels.

Image browser: fixed problem with some tool bar buttons not being updated when ctrl-clicking on thumbnails.

Image browser: shift-click on an input half-size thumbnail now makes it the current image.

Fixed problem with closing a transformation that was as an input or mask for another transformation not necessarily causing the dependent transformations to be recalculated.

13-Dec-2023 – Picture Window 8.0.406

Extended the recent changes to the left and right arrow keys to apply to full-screen display mode as well.

Ctrl-click on a thumbnail no longer scrolls the thumbnails in the image browser. Also, clicking buttons in the image selection tool bar in the image browser no longer scrolls the thumbnails.

Added a setting to File Preferences (Hide Progress Bars) to control when progress bars are displayed.

8-Dec-2023 – Picture Window 8.0.405

The left and right arrow keys now work differently if two or more thumbnails are selected (e.g. via Ctrl-click on their thumbnails). In this case they cycle through the list of selected images either forwards or backwards, making the next or previous selected image the current image. This makes it easier to compare two or more images in different parts of the workspace by quickly flipping between them.

Stretch transformation: added an Aspect Ratio readout as an aid if you want to adjust the output image to specific proportions.

Updated to Icms 2.16 color management engine.

2-Dec-2023 – Picture Window 8.0.404

Macros: "filename" now gets the filename without an extension. Added new macro "extension" which gets the extension only.

Export: fixed some issues with entering long templates and changed some of the text prompts. The macros for image size now return the exported size and not the size of the output image.

Warp: there is now a new tool bar at the top of the dialog box that lets you prevent the corners of the overlay grid from moving beyond the edges of the input image.

26-Nov-2023 – Picture Window 8.0.403

Macros: added macros for image width, height and dpi.

File Export: added a template option to let you define custom filenames using macros.

Composite transformation: as before, you can drag all the alignment points at once by holding down Shift. Now you can also rotate all the alignment points in either the base or overlay image (assuming there are at least two alignment points) at once by holding down Ctrl. The center of rotation is the center of average position of all the alignment points and is marked by a cross in the overlay.

19-Nov-2023 – Picture Window 8.0.402

Amount controls: when you click on the Amount square at the right of the control, the mask menu that drops down is now initially positioned to the second item. If there is no mask, this corresponds to New Mask... If there is a mask but no mask dialog box, this corresponds to Re-open Mask Dialog Box. If there is a mask but there is a mask dialog box, this corresponds to Reset. These common items are now easy to choose you can just double click on the mask menu to select them.

When launching Picture Window via a command line, if the exit_when_done keyword is present, the program will exit after processing the last file in the command line. The

Export transformation also has a new item in its settings menu to force its execution when it is run while loading a script or workspace script. These features combined are meant to allow Picture Window to be run from a Windows batch (.bat) file unattended.

Updated to ExifTool 12.70.

18-Nov-2023 – Picture Window 8.0.401

Grid: fixed problem with Omit Edges and minor grid lines.

Mask: fixed problem with loading saved polygons or splines not returning them to their original locations.

Fixed problem causing multiple recalculations when bypassing/un-bypassing multiple transformations at once.

3-Nov-2023 – Picture Window 8.0.400

Ruler: fixed problem with incorrect angle if the input image was not square.

Layout: fixed typo in panel size display when units were set to mm.

29-Oct-2023 – Picture Window 8.0.399

Mask: fixed problem saving Spline (.spine) files.

25-Oct-2023 – Picture Window 8.0.398

Curve Controls: improved the way markers (lines highlighting the histogram when you click and drag on the input image) are displayed to make them more visible in areas where the histogram is near zero.

Crop: fixed problem with size of crop rectangle sometimes changing slightly when dragging its interior.

Composite, Blend, Paint, Tint, Gradient (Linear, Oval, Sweep, Multipoint), Watermark Transformations: added Linear Light, Vivid Light and Pin Light blend modes.

20-Oct-2023 – Picture Window 8.0.397

Color Remap: fixed several problems and changed wording of the dialog boxes and help to be more consistent.

Kaleidoscope: you can now move both control points at once using shift-click and drag.

Crop, Grid Button: added Dynamic Symmetry as a built-in grid type

DL-C web site gallery page now links to more images.

Updated to ExifTool 12.68.

14-Oct-2023 – Picture Window 8.0.396

Fixed problems using the zoom tool bar on the left half of the split screen.

13-Oct-2023 – Picture Window 8.0.395

When switching between zoom to fit and zoom to 1:1, the scrolling location of the 1:1 view is now preserved.

You can now press the Enter key to simulate clicking OK and Esc to simulate clicking Cancel in the File Save Options dialog boxes as well as various other dialog boxes.

Color Remap: updated help file and Transformations.pdf to better explain how it works. Fixed red highlighting of current color.

Selective Color Correction: As before, if you click on a palette color a new control point is created for the selected color. However, if you shift-click on a palette color, it now sets the other end of the arrow for the current control point (if any) to the selected palette color.

8-Oct-2023 – Picture Window 8.0.394

Color Remap: modified the user interface to make it easier to understand and use.

Updated to ExifTool 12.67.

Slide Show Viewer: added 3 missing bitmaps.

Watercolor Transformation: fixed problem with typing a new Max Dimension not triggering an update.

28-Sep-2023 – Picture Window 8.0.393

Clone, Detail, Levels and Color, Smudge tools: implemented recent brush enhancements similar to those in the Paint tool.

Levels and Color Tool: added new Apply To and Threshold controls that work like the similar controls in the Mask Paint tool.

23-Sep-2023 – Picture Window 8.0.392

Paint tool: fixed problem with saving paint commands in scripts, so the saved image is not restored correctly.

22-Sep-2023 – Picture Window 8.0.391

Paint Tool: added the ability to adjust brush width and angle continuously and to display custom brush shapes as outlines surrounding the cursor. Brush angle is adjusted by a Compass control or by Shift-Mouse Wheel. Brush width is adjusted by a slider or by Ctrl-Mouse Wheel. Outlines of custom brushes show contour lines at 25%, 50% and 75%. Once this new code is stable, I will propagate it to the other transformations that use brushes.

Clone Tool: fixed a problem with the brush shape rotated or flipped in some cases.

Stretch Transformation: swapped the positions of the Top and Bottom sliders.

Custom Brush Shapes: Added a note to documentation -- to avoid clipping rotated custom brush shapes, custom brush shape images must be black everywhere outside the largest circle that fits in the 2000 x 2000 pixel image.

18-Sep-2023 – Picture Window 8.0.390

Fixed some problems with automatically restoring control to transformation dialog boxes after using Alt-Mouse Wheel or Alt-Drag to zoom or scroll the image.

There is a so-called feature of Windows that requires you press the Alt key a second time after an Alt-Zoom or Alt-Scroll to restore normal cursor tracking. The same problem with the Alt key affects many other Windows programs including Adobe Photoshop and Premiere. The problem is caused by a somewhat useless feature of Windows, namely if you press Alt and release it, the menu bar is enabled and if you then press a letter key, the corresponding menu item is executed. Fortunately, there is a way to disable this Windows behavior via a freeware program called AutoHotKey in combination with a script that remaps certain uses of the Alt key. Starting with the next version, this fix is automatically installed in your Windows Startup folder as the file: *Alt_menu_acceleration_disabler.exe*. You will need to restart your computer to get it to load the first time it is installed. By default, the fix is enabled, but if for some reason you want to restore the way the Alt key worked before, you can toggle it on or off by pressing both Alt keys at the same time. For more information on this, see the following YouTube video: <https://www.youtube.com/watch?v=vRld4bVFrpU>.

14-Sep-2023 – Picture Window 8.0.389

Full Screen Display: fixed problems with displaying certain image types.

14-Sep-2023 – Picture Window 8.0.388

Clone Tool: fixed backward incompatibility problems with custom brush shapes causing errors when loading some pre-existent scripts.

Full Screen Display now applies the proofing profile and gamut alarm, if they are turned on.

10-Sep-2023 – Picture Window 8.0.387

Clone Tool: temporarily reverted to earlier version without custom brushes as there was a serious problem with the new version.

A number of transformations such as File/New, Resize, Watercolor, Layout, etc. let you enter an image size manually. Accidentally entering a very large number, can cause Picture Window to crash or create a very large, unwanted image. There is now a limit (which you can set in File Preferences as Image Dimension Warning) for manually entered image widths or heights above which Picture Window will issue a warning so you cancel the entry if it was made in error. The default value is 20000, but if you have a limited amount of memory you might want to use a smaller value. If you have lots of memory and routinely work with very large images, you might want to use a larger value.

10-Sep-2023 – Picture Window 8.0.386

Custom brush shapes now respond to brush width and rotation angle settings.

Custom brush shapes now work with the Clone, Detail, Levels and Color and Smudge tools.

7-Sep-2023 – Picture Window 8.0.385

Added the ability to create and use custom brush shapes to the Paint transformation. Please see the revised help file for details. Future releases will extend this feature to the

Clone, Detail, Levels and Color and Smudge tools. A full install is required to get one new bitmap.

Autorange transformation: removed RGB color space option – any existing scripts that use it will default to HSV.

Fixed problem that could cause a crash when processing 16-bit black and white images in some rare cases.

Made a code change that should fix a problem with PWP 8 not reading or writing some image file types on Windows 7.

25-Aug-2023 – Picture Window 8.0.384

When loading a script file or running a batch process, the main image area is now redrawn each time a new transformation is recalculated, so you can see the images pass through all their intermediate states as they load. Also, progress bars are now suppressed when loading scripts.

21-Aug-2023 – Picture Window 8.0.383

Image Browser: changed click and drag scrolling to no longer require holding the Alt key down. You can now scroll the image browser by clicking and dragging on the blank space between thumbnails.

17-Aug-2023 – Picture Window 8.0.382

Stretch Transformation: fixed problem that could cause the transformation to crash in some cases. Added a marker line overlay to the output image to show where the region boundaries are. Clicking on the output image displays the marker lines until you release the mouse button.

Lines and Arrows Tool: if the Snap button is depressed, adding a new control point now immediately snaps. Previously you had to move the new control point slightly.

Mask: fixed problems with dragging rotated oval gradient control points.

11-Aug-2023 – Picture Window 8.0.381

Right-click menu on a side branch now includes Favorites submenu.

Scratch Removal Tool: you can now select a scratch by clicking anywhere inside its outline.

Image Browser: as an alternative to using the scroll bars, when you hold down the Alt key, you can scroll the thumbnails by clicking and dragging.

Updated ExifTool to version 12.65.

8-Aug-2023 – Picture Window 8.0.380

Scratch Removal Tool: fixed problem with parts of scratch path not being removed in certain cases.

5-Aug-2023 – Picture Window 8.0.379

Fixed virus detected issue when downloading Picture Window.

4-Aug-2023 – Picture Window 8.0.378

Fixed problem of image browser not being redrawn correctly after canceling a top-level transformation if the image browser was configured as a separate window.

Minor changes to Crop transformation context menu.

1-Aug-2023 – Picture Window 8.0.377

Crop Transformation: fixed problems with dragging the sides of rotated cropping rectangles and with dragging the output image to move the center of the cropping rectangle. Added a list of common proportions to the popup menu displayed when right-clicking on the input image.

Added File submenu to right-click popup menu on thumbnails in Image Browser.

Speck Removal Tool: fixed problem of not reporting a size mismatch if input image has different pixel dimensions than the last time.

Fixed problem of main window not being redrawn correctly in some cases after canceling a top-level transformation.

29-Jul-2023 – Picture Window 8.0.376

Hue Saturation Transformation: fixed incorrect placement of color balance controls in some cases.

Two Zone and Three Zone Transformations: added color balance controls (if the input image is color).

26-Jul-2023 – Picture Window 8.0.375

Stretch Transformation: there are now three Scale sliders so you can adjust the scale factors for the areas on either side of the marker lines as well as for the area between the marker lines.

Fixed problem with installer asking to remove previous version before installing new one.

24-Jul-2023 – Picture Window 8.0.374

Added new Stretch transformation. It lets you expand or compress a selected horizontal or vertical strip of an image. See the help file or Transformations.pdf for details.

22-Jul-2023 – Picture Window 8.0.373

Warp Transformation: fixed problem causing overlay not to be displayed when transformation starts up if only the input image is being displayed.

16-Jul-2023 – Picture Window 8.0.372

Monochrome Transformation: fixed problem exiting from transformation dialog box not restoring the normal scroll and zoom mouse operations.

7-Jul-2023 – Picture Window 8.0.371

Ruler Transformation: menu item was supposed to be grayed out if the workspace is empty.

When changing the current image, the image browser now brings both the image thumbnail and any related input and mask mini-thumbnails into view. Previously the inputs and masks could be clipped.

23-Jun-2023 – Picture Window 8.0.370

Match Reference: added the missing commands to the settings menu to save color curves or selective color correction settings.

Fixed problems with saving image files whose filenames include more than one period.

17-Jun-2023 – Picture Window 8.0.369

Two Zone and Three Zone transformations: reversed the meaning of the transition sliders (100% <-> 0%). Pre-existing scripts reverse the slider values when they are loaded.

Match Reference: updated the descriptions in the help file and Transformations.pdf to be less confusing.

10-Jun-2023 – Picture Window 8.0.368

Fixed problem reading certain image file metadata.

File Export: fixed problem with restoring the Folder control when editing the transformation.

Updated to ExifTool 12.63.

24-May-2023 – Picture Window 8.0.367

Added support for Nik version 6 plug-ins.

Fixed multiple warning messages when closing multiple transformations in some cases.

18-May-2023 – Picture Window 8.0.366

When loading a script which has one or more missing files, the dialog box (Select a replacement file/Edit pathname/Change drive letter to) remembers your last selection.

11-May-2023 – Picture Window 8.0.365

Blur/Blur More: fixed problem causing error message when transformation was used with a mask.

Various transformations (Adjust, Brightness Curve, Color Curves, Color Zones, Conditional Color Curve, Monochrome, Stack Images) with histogram displays and Amount controls: when Auto-preview is off, updating of histograms is now deferred until Auto-preview is turned back on.

7-May-2023 – Picture Window 8.0.364

When saving and loading scripts, the information about whether an image has been saved or saved and modified is no longer reloaded. All images after loading a script therefore come up as unsaved.

Removed changes to File/Save Back introduced in 8.0.361 version as they were causing possible problems with saving files with incorrect metadata.

Speck Removal: fixed problems causing screen not to update correctly in some cases if only the input image is displayed.

28-Apr-2023 – Picture Window 8.0.363

Masks and Amount controls: fixed problem with incorrect menu displayed when clicking on Amount image box in some cases where the Amount control has no sliders. Also fixed problems with displaying incorrect mask dialog box in some cases when a transformation has more than one mask and you switch between them.

26-Apr-2023 – Picture Window 8.0.362

After editing a File Open or Paste transformation to load a different image, the transformation and all downstream transformations are marked as un-saved (the S or M icon in the thumbnail is removed) since the underlying image has been replaced.

Hue Saturation transformation: reduced the minimum dialog box height so you can shrink it to fit some low-resolution displays.

19-Apr-2023 – Picture Window 8.0.361

Advanced Sharpen: fixed problem of histograms not being updated in some cases.

File/Save Back: changed the definition of the "original folder". If the current image or any image above it has been saved, the corresponding folder is used. If no image has been saved, the top-level image's folder (if any) is used. Eventually, it defaults to My Pictures.

Mask dialog box: tool tips for Mask Add/Subtract buttons now include keyboard shortcut.

Proofing main tool bar button tool tip now includes the name of the proofing profile.

13-Apr-2023 – Picture Window 8.0.360

Updated to ExifTool 12.60.

Light Falloff transformation: fixed problem in some cases producing an all-black output image – also updated help file to add an example.

Curve controls: fixed problem of grid not being displayed if there is no histogram.

Scripts: fixed problem of certain masks not being correctly regenerated if the corresponding transformation was bypassed when the script was saved.

7-Apr-2023 – Picture Window 8.0.359

Color Zones transformation: made Amount controls visible on both screens for each zone.

Displace transformation: renamed Horizontal Shift and Vertical Shift to Shift and Perpendicular Shift.

Added a description of Hue-Brightness histograms to help file. Improved the display to make histograms easier to see.

Image Browser tool bar: changed the close selected transformations X button to a trash can icon to reduce confusion with a similar button on the main tool bar.

4-Apr-2023 – Picture Window 8.0.358

Changed up arrow cursor to a 4-way arrow cursor in most cases. This cursor usually indicates that you can move some object by dragging its interior.

Updated to ExifTool version 12.59.

Displace transformation: added an Angle control for Rectangular displacements.

Hue-Saturation transformation: added color balance Remove/Add controls and fixed problem with brightness histogram expansion. Brightness histogram now has colored bars. Fixed some minor issues.

Color Zones transformation: fixed problems with 48-bit color input images and some other minor issues.

1-Apr-2023 – Picture Window 8.0.357

Two Zone and Three Zone Adjustment: the histogram now has colored bars.

Mask: fixed problem of freehand mask tool outline not showing up in some cases.

Color Balance now shows up as Balance in the Color menu.

Fixed problem in HSV hue histograms with mask and colored bars.

Histogram Tool: added HSV-HB and HSL-HL hue-brightness histograms.

Added a new Color Zones transformation. This transformation lets you define up to three zones in an image based by selecting a brightness range and/or a hue range. Then you can make independent adjustments to each zone's brightness, saturation and color balance. See the updated help file and Transformations.pdf for more information.

18-Mar-2023 – Picture Window 8.0.356

Lines, Arrow, Text Tool: You can now drag the entire current line to a new location by Ctrl-Shift dragging it.

Gray histograms now display with bars that represent their brightness level. Fixed some problems with displaying RGB histograms. Histogram grids are now displayed behind the histogram, so they do not obscure any of the bars. Histogram backgrounds for gray histograms are displayed as a gradient which provides better with the histogram bars, and grid lines are drawn in a color that contrasts with the background. Histogram bars for hue, saturation, red, green or blue channels are now displayed in a color scheme compatible with the gradient strip just below the histogram. Histogram smoothing now works on histograms with colored bars. Updated help and various pdf files to include new features.

Curve controls: added an option to suppress the histogram grid.

15-Mar-2023 – Picture Window 8.0.355

Brightness Curve: Color Balance now has both Add and Remove colors.

Wave and Tile transformations now issue an error message if the output image width or height would exceed 40,000 pixels.

The Cancel button in progress indicators should now work on the first click.

Multipass Sharpen: clicking Cancel button now stops the current sharpening pass and all succeeding passes.

13-Mar-2023 – Picture Window 8.0.354

Brightness Curve: added saturation and color balance controls for color images.

Fixed some shutdown problems when closing Picture Window.

Expand Dynamic Range: fixed memory leak for Exposure Fusion method.

Speck Removal: fixed some problems with changing speck radius.

7-Mar-2023 – Slide Show Viewer 1.0.12

Fixed missing bitmap error.

6-Mar-2023 – Slide Show Viewer 1.0.11

Fixed problem with right click on a thumbnail to select Delete Current Slide not working.

Added a new Curtain transition type. Fixed some problems with slide transitions in Manual mode. Separated the Slide Show Viewer bitmap files from the ones used by Picture Window, so uninstalling Slide Show Viewer will not delete some of the Picture Window bitmaps.

4-Mar-2023 – Picture Window 8.0.353

Updated to latest Icms 2.15 color management system.

Updated Slide Show Viewer to version 1.0.10. Fixed numerous problems including clicking on thumbnails sometimes selecting the wrong image, incorrect transition displayed for the first slide displayed, incorrect fade to black transition algorithm, speeded up transition computations, reduced flashing when dragging thumbnails, incorrect display of multiply selected thumbnails, and deleting thumbnails only working on the current slide and not on all selected slides.

1-Mar-2023 – Picture Window 8.0.352

Updated to ExifTool 12.57

Color Picker: fixed some problems with setting the minimum window size.

23-Feb-2023 – Picture Window 8.0.351

Improved accuracy of colored bar histograms.

Add colored bars to hue and saturation histograms as well as HSV-V and HSL-L histograms and all tools and transformations that display them.

Made colored histogram bars the only option for No Histogram Smoothing, so there are now only three Smoothing options instead of four. Colored histogram bars are thus the default now.

Expand Dynamic Range: fixed several problems with case of no over- or under-exposed image. Final curve was not being applied and histogram was not being displayed.

Changed the way RGB histograms are displayed.

Updated help file and various pdf files to reflect new color histograms.

17-Feb-2023 – Picture Window 8.0.350

Histogram Tool: speeded up colored HSV-V and HSL-L histogram display.

Curve Controls: added the option to display colored brightness histograms via the Curve Settings Menu. The colored bar option is implemented as a variation of histogram smoothing since smoothing cannot be combined with colored bars. You can set the default curve settings under File Preferences so curve controls will initially come up solid or colored. This feature is implemented in most transformations that have curve controls, including Adjust, Brightness Curve, Color Curves, Conditional Curves, Expand Dynamic Range, Raw Develop, Orton Effect and Halftone. The Mask Curve tool also now works with colored histogram bars.

13-Feb-2023 – Picture Window 8.0.349

Image Stitching for Panoramas.pdf: added a section on how to use PTGui to stitch panoramas.

Histogram Tool: for HSV-V and HSL-L histograms you now have the option of displaying the brightness histogram such that each vertical bar is broken down by hue, indicating the relative number of pixels of each hue for each brightness level. Please see the updated help file for more information and examples. You will need to do a full install to get new bitmaps. Performance when using this new feature is a little sluggish due to the complexity of drawing the color histogram.

6-Feb-2023 – Picture Window 8.0.348

High Contrast (special effects transformation): Added new Settings menu items to provide the ability to set the threshold automatically using any of several methods. See the help file or Transformations.pdf for details.

Mask Separate Tool: increased the maximum number of white and black color samples from 4 to 8. Also, labeled control points are now overlaid on the input image at the locations where you clicked to set the current color. For other changes, see the updated help file or Creating and Using Masks.pdf.

21-Jan-2023 – Picture Window 8.0.347

Frame transformation: fixed problem with editing an existing transformation in some cases causing program to hang.

20-Jan-2023 – Picture Window 8.0.346

Layout and Frame transformations: fixed problems with maximizing and restoring the transformation dialog box.

Added two new ICC profiles for the DCI-P3 color space – DCI P3 D65 and DCI P3 DCI. The old DCI-P3 profile is retained for compatibility – the two new ones are more recent

versions with two different white points. These new profiles are installed automatically when Picture Window starts up. For more details, see:

<https://www.color.org/chardata/rgb/DCIP3.xalter>.

Updated to ExifTool 12.55.

14-Jan-2023 – Picture Window 8.0.345

The Mask Freehand Outline tool now clips automatically when you try to draw outside the edges of the input image.

When a size-preserving transformation starts up, if the entire input image is visible, the display is now zoomed to fit if the initial display is split screen. As before, if the input image is zoomed in, both halves of the split screen are also be zoomed in to the same level as the input image.

9-Jan-2023 – Picture Window 8.0.344

Fixed problem causing Invalid Script Version Number errors when PWP is used in a locale that does not use decimal points.

8-Jan-2023 – Picture Window 8.0.343

Speck Removal: fixed some issues with displaying control points when dragging or resizing them.

7-Jan-2023 – Picture Window 8.0.342

Dehalo transformation: fixed problem with amount mask not being applied correctly.

Speck Removal: In Patch Match mode (and only in Patch Mode), there is now a new slider displayed just below the Speck Radius slider called Speck Outer Radius Factor. This slider runs from 1.0 to 4.0 and controls the size of the outer radius of the area in the input image that will be searched for a matching bit of image to clone over the speck. Larger values cause Picture Window to search a larger area to find a matching patch.

28-Dec-2022 – Picture Window 8.0.341

Fixed problem in Combine Channels transformation causing it to crash on startup.

Added a new Dehalo transformation to reduce halos in over-sharpened images. See the updated help file or Transformations.pdf for details. While it seems to work fairly well, this transformation is still a bit of a work in progress – I hope to improve the halo detection algorithm in the future.

23-Dec-2022 – Picture Window 8.0.340

Added a help topic on Installing Picture Window, covering portable installation and installing for multiple users.

When saving scripts with Image Copies (rather than Image Names), the pathnames of the associated image files stored in the script file are no longer relative to the folder containing the script file but are now absolute. This fixes several problems, including missing file errors when loading autosaved workspace scripts. If the folder containing the script file and images folder is renamed or moved, you will get a missing file warning

when loading the script but if you continue, Picture Window will offer to substitute image file pathnames in the new folder. Old script files will continue to work the same way as before, while new script files will use absolute pathnames.

21-Dec-2022 – Picture Window 8.0.339

Workspace scripts are now autosaved right before and after reading a script or workspace script file. This helps keep the autosaved files up to date.

Added a pre-check before loading script or workspace script files to look for File Open commands for which one or more of the referenced files does not exist. This gives you the option to continue and ask for replacement pathname(s) or to cancel and not attempt to load the script file. The pathname of the first missing file detected is displayed in the dialog box.

Pressing the Left or Right arrow keys when the current image is top-level now move left or right among the top level images. Previously it moved to the bottom of the branch instead.

Compass control: made the adjustable arrow bolder.

13-Dec-2022 – Picture Window 8.0.338

Color Picker: instead of using Shift and Ctrl to limit moving the control point in the color hexagon, there is now a separate tool bar with buttons labeled HS, H and S. You will need to do a full install to get the new bitmaps.

Selective Color Correction Transformation: Similar to the color picker, a tool bar was added at the top of the dialog box to let you adjust hue and saturation, hue only or saturation only. Similarly for the Selective Color Correction Control (as used in the Adjust transformation).

A workspace autosave is now performed just before you load a script or workspace script or just after you save a script or workspace script – either explicitly or as a side-effect of saving and image file. This should improve restoring a workspace after a crash.

The default settings for the Card to Folder command are now stored in the same folder as Session.state, no longer in My Documents\Card to Folder. This means that if you run Picture Window on different computers, the Card to Folder settings will be independent, even if you synchronize My Documents between the computers. This change takes effect the next time you save default settings in Card to Folder. Until then, the default settings will continue to be retrieved from My Documents.

In full-screen display (Ctrl-F) mode, the left and right arrow keys are now active as well as up and down.

7-Dec-2022 – Picture Window 8.0.336

All transformations except those that are top level or whose output image size may differ from their input image size now start up with the same zoom and scroll settings as their input image. When you double click to edit a transformation however, the output image is zoomed to fit the available space. Previously only a few of the retouching tools worked this way.

Detail Tool: added a button in the upper right corner of the dialog box to display the blurred input image in place of the output image. This makes it easier to select a Blur Radius appropriate for the level of detail you want to remove.

Batch Operations – if a batch operation runs to completion, the current file is set to the first one in the list. If a batch operation is terminated before completion, the current file is set to the file being processed when the batch process was terminated.

2-Dec-2022 – Picture Window 8.0.335

Added a new Detail tool similar to Clone, which copies only details and texture from one place in an image to another. It works by separating the input image to high pass and low pass versions. The high pass information is copied from one place in the image to another. This replaces the texture at one point in the image with the texture from another point, similar to Photoshop's healing brush. There is an adjustable Blur Radius which controls the level of detail copied. This tool is good for retouching skin blemishes or removing dust spots and scratches.

Terminating a batch job that is paused at a breakpoint now cancels the transformation before it terminates the batch job.

30-Nov-2022 – Picture Window 8.0.334

Clone: fixed several problems including inconsistent display of the Synchronized Scrolling tool bar, Undo not restoring the state of synchronized scrolling and switching display mode clearing the Source Image setting and breaking the link between the source and target images.

Composite, Blend, Difference, Filter, Match Reference, Stereo, Watermark Transformations: fixed various issues with displaying and implementing synchronized scrolling.

Right clicking on the File Open file list pops up a menu letting you select all or none of the files in the list.

24-Nov-2022 – Picture Window 8.0.333

In the menu displayed when you click on the Amount box, the list of images and masks that can be used to initialize the Amount Mask is now sorted with the most recent transformations first and with masks associated with a transformation following the transformation in ascending order.

The Enable Proofing and Enable Gamut Alarm buttons are now displayed with a yellow background when they are depressed. A full install is required to get the new bitmaps.

In the Color Picker, if a color wheel is being displayed, holding down the Shift key will lock the hue and holding down the Ctrl key will lock the saturation when you are dragging the control point.

22-Nov-2022 – Picture Window 8.0.332

Added a confirmation message when enabling the gamut alarm if proofing is disabled. This lets you choose to enable proofing at this time or not.

Fixed problem when loading a script or workspace script file and trying to open a file that no longer exists – the change drive letter options was not working.

In transformations with Curve controls (e.g. Brightness Curve, Color Curves, etc.), a single click on the input or output image now displays a red marker on the curve histogram. Previously, it was necessary to move the mouse cursor slightly to get a red marker to display.

19-Nov-2022 – Picture Window 8.0.331

Mask Tool: the current mask is no longer finalized by Alt-double clicking on the input image.

Updated to ExifTool 12.50.

Installed new code signing certificate to replace one that was about to expire.

7-Nov-2022 – Picture Window 8.0.330

Mask Tool: the current mask is no longer finalized by using the mouse wheel to zoom the image. Also, when using mask tools except those that use the mouse wheel for other purposes, it is now unnecessary to hold down the Alt key to zoom by rotating the mouse wheel.

3-Nov-2022 – Picture Window 8.0.329

Print: fixed problem with Windows Print Setup dialog box not being presented before the PWP Print dialog box.

1-Nov-2022 – Picture Window 8.0.328

Scratch Removal Tool: fixed problem causing random crash when adding new control points.

Removed File/Print Setup command since it is unnecessary and was not working.

Unsharp Mask: fixed problem with threshold slider being redrawn incorrectly when dragging dialog box from one monitor to another.

Mask lasso tool: temporarily removed out of bounds checking since it was not working when the image was zoomed it.

23-Oct-2022 – Picture Window 8.0.327

In the Image Browser, the captions of auxiliary input images are now displayed as the image number and transformation name and no longer as the generic name of the input. This makes it easier to see which image is selected – since the transformation number is displayed first, even if the rest of the command is truncated, you can still identify which image is being referenced.

Fixed problem with Apply button when dragging transformation dialog boxes from one monitor to another.

Multipass Sharpen now remembers which tab is currently selected when you close and then reopen the dialog box.

Updated color management system (lcms) to version 2.14.

Expand Dynamic Range: added a Strength slider when using the Exposure Fusion option.

20-Oct-2022 – Picture Window 8.0.326

Added support for Topaz Gigapixel AI plug-in.

Fixed problems with scrolling the main image area in certain cases.

18-Oct-2022 – Picture Window 8.0.325

Composite transformation. Hovering over the Ov button now displays the thumbnail caption for the overlay image, if any.

Readout tool: fixed Lab readout values which were being displayed based on the wrong gamma correction.

When dropping files on a File Open dialog box, the dropped files are now initially selected – previously they were initially de-selected.

Added a Gamut Alarm button to the Proofing tool bar at the top of the main window. You will need to do a full install to get the new bitmap.

14-Oct-2022 – Picture Window 8.0.324

If a transformation only takes control over one half of a split screen display, the other half can now be zoomed or dragged without holding down the Alt key.

When loading a script or workspace script file and trying to open a file that no longer exists, you now have the option of editing the pathname directly. This is useful if you have, for example, renamed the folder containing the image file and just want to edit the name manually instead of selecting the file using the Windows File Open dialog box.

Fixed problems with Texture, File New, and Size to Fit transformations not always updating correctly to changes in the size or type of their Reference Image.

Spiral transformation: added checkbox to freeze the edges of the output image.

Updated to ExifTool 12.48

12-Oct-2022 – Picture Window 8.0.323

Linear Gradient Transformation: changed the default Type to Skew. Holding down the shift key while dragging the first or last control point now forces the gradient to be horizontal or vertical, whichever it is closest to, regardless of the current Type setting.

Card to Folder command: added an option to verify each file copy by comparing the original file to the copy. Also added an option to delete the DCIM folder on the camera card after all the files have been copied. Files are not deleted if there was any error while copying. A warning is issued if only some of the files were copied.

Mask freehand tool: modified to restrict drawing to the rectangle currently occupied by the input image.

Added support for Topaz Photo AI plug-in.

When synchronized scrolling of a split screen display is enabled, both zoom tool bars are now enabled and you can use either one to zoom both halves of the split screen. Scroll bars are now displayed for both the input and output image and the two sets of scroll bars both scroll both halves of the split screen. Also fixed problems with the output image scroll bars when synchronized scrolling was turned off.

8-Oct-2022 – Picture Window 8.0.322

File Export command and transformation: if you opt to export as a specific file type and then click the button to select the default file save options, the tab for the selected file type (if any) is now automatically selected.

Mask freehand tool: modified to try to avoid wrap-around when drawing outside the image in some cases.

Fixed problem causing crash when saving script files via the Script/Save As command.

Clone tool: fixed problem causing input image display not to update in some cases when selecting a new source image.

21-Sep-2022 – Picture Window 8.0.321

Crop and Warp now number their 4 control points. Similar to Composite and Level, you can recenter the display on a control point by typing its number on the keyboard. Typing the same number multiple times zooms the display each time.

Level now works consistently with Crop, Warp and Composite in that typing a number multiple times zooms the display each time. Fixed problem in Composite causing the number keys to remain active when only the output image is being displayed.

Updated to ExifTool 12.45.

Closing the File/Preferences dialog box now closes Font and Theme dialog boxes if they are open. Added Verdana to the list of available UI fonts.

19-Sep-2022 – Picture Window 8.0.320

File/Re-Save can now be used immediately after a File Save that creates a script file. Previously, it only worked after loading a script file, which continues to work as before.

9-Sep-2022 – Picture Window 8.0.319

Added an OK button to the dialog box that asks for an image type when saving scripts with image copies. Clicking OK is the same as closing the dialog box as there is no cancel option.

Changed the way the Left and Right arrow keys work. If the current image is a side branch or a top level image, as before they select the previous or next image at the same level. Otherwise, they select the last image in the previous or next branch, not including splitters. This provides a convenient way to quickly flip back and forth between the results of two or more different branches representing different ways of processing the same image.

7-Sep-2022 – Picture Window 8.0.318

Layout: fixed problems with panels set to Panel Matches Image Dimensions or Panel Matches Image Size in Pixels, when the image is too large to fit in the output image without cropping. This now automatically crops the input image if necessary if you resize the input image after placing it in a panel, if you shrink the output image size or if you load a new settings file.

31-Aug-2022 – Picture Window 8.0.317

Fixed problem in Theme dialog box causing incorrect colors for some controls when re-opening the dialog box after loading a new theme.

Color Primaries: added a new Method setting that lets you choose between Matrix and Profile. The new Profile setting works by creating a color profile with the new primaries and using the color management system to convert the image data to that color space. When using Profile, changes to the white point are ignored.

27-Aug-2022 – Picture Window 8.0.316

Fixed minor spacing error when displaying the comment icon.

Advanced Sharpen: fixed crash in some cases when adjusting dialog box separator position. Also fixed problems making it very difficult to adjust markers displayed under histograms.

17-Aug-2022 – Picture Window 8.0.315

Monocolor: added a Method setting (Soft or Hard).

Readout Tool: closing Color Picker now unchecks Show Color Picker in Settings menu. Added check for coordinates outside the current image.

Brightness Curve: fixed problem with Amount slider not working right after starting up the transformation.

13-Aug-2022 – Picture Window 8.0.314

Clone, Paint, Smudge, Levels and Color Tools: fixed problem causing all strokes to be erased when moving the transformation up or down using the Shift-Up or Shift-Down keyboard shortcuts.

Hue Saturation: fixed several problems with Show Affected Region, especially for 48-bit color images.

11-Aug-2022 – Picture Window 8.0.313

Readout Tool now remembers the Display Color Wheel state between sessions. Also fixed some problems with control of the probe.

10-Aug-2022 – Picture Window 8.0.312

Readout Tool: The Readout Settings Menu now has a new item at the bottom to bring up a color picker window that updates as the readout changes. This color picker is for display purposes only – it is disabled to prevent you from selecting colors or modes other than the color wheel.

Print: fixed problem with crop box not being editable.

10-Aug-2022 – Picture Window 8.0.311

Favorites button: the last favorite transformation selected (if any) is now remembered between sessions and its button text is displayed in red in the Favorites dialog box.

For most transformations that have Amount controls, the Settings Menu now has two reset options: Reset All and Reset All But Masks. The second option is new and resets everything except the Amount controls which it leaves intact, including their associated mask, if any.

Expand Dynamic Range: fixed problem with 8-bit images giving an error message in some cases.

Fixed problem with red markers in Curve controls not being erased when you release the mouse button and being drawn to the wrong height if histogram expansion was enabled.

8-Aug-2022 – Picture Window 8.0.310

Curve controls: when using the probe on the input image in dual histogram mode, the red markers are now correctly displayed on the input histogram instead of the output histogram. Red probe lines now accumulate as you click and drag on the input image and are erased when you release the mouse button. The height of the red lines now tracks the histogram values so they no longer obscure the histogram underneath. Flashing has been reduced. The Histogram tool (accessed from the main tool bar) also now works the same way.

Fixed problems with Shift-Click and Ctrl-Click on Amount box when using dual Amount controls.

Fixed problems undoing certain mask operations.

6-Aug-2022 – Picture Window 8.0.309

Export command and transformation now support a new resizing method which makes the output image fit within a bounding box of given pixel dimensions and fills in any blank space with a solid border color you can select.

Right-clicking on the Favorites button in the main tool bar, instead of displaying the Favorites dialog box, immediately selects the last transformation you selected from the Favorites list, if any. Left click works as before.

Curves and Histograms.pdf: added new examples at the end of the document illustrating several useful contrast enhancement techniques. Recommended reading.

1-Aug-2022 – Picture Window 8.0.308

The popup Amount menu that appears when you click on the white box to the right of the Amount sliders now displays mask thumbnails (if any) as well as their names.

29-Jul-2022 – Picture Window 8.0.307

Optimized Count Colors command and fixed potential stack overflow crash for certain large images with a small number of colors.

27-Jul-2022 – Picture Window 8.0.306

Updated to LibRaw.dll 0.21 – includes support for some newer cameras.

Updated to ExifTool 12.44.

Fixed Count Colors for 48-bit color images.

23-Jul-2022 – Picture Window 8.0.305

Preview Tool: fixed error message when closing Picture Window with a Preview window open, and made Preview window respond immediately to Show Clipped Pixels changes.

Adjust transformation: optimized performance for the case of just adjusting the Amount control.

22-Jul-2022 – Picture Window 8.0.304

Precise Gaussian Blur: fixed problems when setting amount mask slider to anything other than 0% .. 100%. Also fixed problems specific to this transformation with using 16-bit masks.

Expand Dynamic Range: reworked code for greater efficiency and added an Exposure Fusion option as an alternative to HDR. Please see the updated help file or Transformations. pdf for details.

16-Jul-2022 – Picture Window 8.0.303

Mask: fixed numerous problems with Mask Undo.

Readout tool no longer repositions the cursor to the last readout point when the current image changes.

Line and Arrow tool now limits control points to being no more than half the width or half the height of the image out of bounds.

Brightness Curve, Color Curves, Mobius transformations – fixed problem of double amount slider being displayed when the dialog box initially comes up, even if the black settings are reset.

Preview windows: fixed problem with color management not being applied and added automatic zoom to fit when resizing the window manually.

10-Jul-2022 – Picture Window 8.0.302 and Slider Show Viewer 1.09

Color Balance – added vertical separator between controls and color curves. If you widen the dialog box, you can now drag the separator to widen the Amount control.

Multi Color Balance – If you widen the dialog box, you can now drag the vertical separator to widen the Amount control.

Slide Show Viewer – now works if some or all of the image files are shortcuts. You can use this to create a slide show of selected files from various folders without having to make redundant copies of them.

Added support for Nik plugins version 5.

Restored Apply buttons in all transformations in order to make Preview windows work smoothly.

Preview windows now replace clipped highlight and shadow pixels with colors as defined in File Preferences.

Readout Tool: fixed Lab readouts for images with gray profiles.

6-Jul-2022 – Picture Window 8.0.301

Compare – reduced flashing when switching images in Blink mode. Changing the Output setting now updates the output image displayed in the main image area as well as the thumbnail image in the image browser.

Closing all images now resets the current mode to Scroll.

When zooming or scrolling the main image area by holding down the Alt key while a transformation is active, control is now automatically returned to the transformation when the zoom or scroll operation is finished. For example, you can now use the Alt key to zoom and scroll and then resume cloning without having to click on the Clone transformation dialog box.

Hue/Saturation transformation now starts up in split screen mode, letting you use the probe on the input image without having to change the display.

Amount controls: fixed problem of mask menu being displayed even when you click outside the mask box to the right of the sliders.

Removed Apply button from all transformations.

Editing a bypassed transformation now works a little differently. Previously, this always triggered a recalc of any downstream transformations before the transformation started. Now, once you start editing, if you click the Cancel button, the transformation exits and remains bypassed and there is no recalc. If you click the OK button, the transformation is un-bypassed and a recalc is initiated.

For transformations that have their own probe, fixed problems with closing the transformation dialog box with a Mask dialog box open.

Readout Tool now updates correctly when using the Ctrl-D keyboard shortcut and in other situations where the display is updated. This lets you compare readout values from the same part of the input and output images.

Fixed internal error message when closing program with a mode window open (histogram, readout, magnifier, etc.)

11-Jun-2022 – Picture Window 8.0.300

Added new transformation – Extend Dynamic Range. This helps you recover highlight and/or shadow detail by combining an image with underexposed and overexposed versions. This new transformation is easier to use than Stack Images for this purpose. See the updated help file or Transformations.pdf for details and examples.

For transformations that have their own preview area, you can again click on either the input or the output image to re-center the preview.

8-Jun-2022 – Picture Window 8.0.299

Fixed problem causing image dragging via the hand cursor to be deactivated in the main image area in some cases when it should have been active.

Improved recovery if preferences, theme or favorites file is corrupted.

4-Jun-2022 – Picture Window 8.0.298

Hue Saturation Transformation: fixed problem with processing 100% red in input images. Changed Show Affected Area to reflect affected areas in the output image instead of the input image.

Updated to Exiftool 12.42.

2-Jun-2022 – Picture Window 8.0.297

Hue Saturation Transformation: fixed problems with right-click context menu in the hue-saturation histogram.

Fixed problem when saving image files – when switching file types, the version number was assigned based on the old file type and not the new file type.

Fixed problem that caused some probes that were intended to be used only on the input image to also operate on the output image, when not in split screen mode.

31-May-2022 – Picture Window 8.0.296

Stack Images: fixed problem causing the Final Curve histogram not to be displayed when editing the transformation. Updated help file and Transformations.pdf to add that you can photograph the test pattern on your monitor when you use the Build Curves command from the Settings Menu.

28-May-2022 – Picture Window 8.0.295

Image Info: fixed problem causing Date Taken to display the wrong month in some cases.

Transformations with dual Amount sliders (currently only Brightness Curve, Color Curves, Mobius) now gray out the lower (black) Amount slider if the corresponding settings have no effect on the image. Since this is the default initial condition, it grays out the black slider on startup. As soon as you make a change to the black settings, the black slider is restored.

Mobius transformation: fixed problems with 48-bit color images when used with a mask.

25-May-2022 – Picture Window 8.0.294

Drop Shadow, Masks, Transparent PNG and Wave transformations: fixed problem with Amount controls without sliders sometimes displaying sliders anyway.

24-May-2022 – Picture Window 8.0.293

Layout: fixed crash on startup.

23-May-2022 – Picture Window 8.0.292

Watercolor: fixed problems with preview area when resizing transformation while the input image is being displayed.

22-May-2022 – Picture Window 8.0.291

Fixed another crash when selecting existing masks and a problem causing a slider to be displayed for certain Amount controls that are not supposed to have a slider, such as those in the Masks transformation.

22-May-2022 – Picture Window 8.0.290

Fixed crash when creating new masks in some cases.

22-May-2022 – Picture Window 8.0.289

Watercolor: fixed problem causing a blank preview after a Reset and problems with dragging the preview area to scroll it.

Multipass Sharpen: fixed problem causing preview to sometimes show an incorrect result depending on which passes were enabled.

Zero-Centered Amount Controls (e.g. as used in the Brightness and Saturation transformations): fixed problem of double-click not resetting the Amount slider correctly.

Advanced Sharpen, Denoise, Gaussian Blur, High Pass, Linear Blur, Multipass Sharpen, Precise Gaussian Blur, Unsharp Mask: fixed a number of problems related to the preview area displaying incorrectly and click and drag not scrolling the preview correctly in some cases. The 2:1 preview buttons are now only applied while you hold the button down. When you release the button, the preview reverts to 1:1.

1-May-2022 – Picture Window 8.0.288

Added support for opening (but not saving) WEBP files – an image file format created by Google as an alternative to JPEG for use on the web. To get this to work on older versions of Windows, you may need to download and install *Webp Image Extensions* from the Windows Store.

Increased maximum mask blur radius from 1000 to 2000 pixels.

30-Apr-2022 – Picture Window 8.0.287

Precise Gaussian Blur, Zoom Blur, Spin Blur, Multipass Sharpen, Watercolor transformations: speeded up Cancel after editing an image by saving a copy of the initial output image. I can do this for some more transformations if there is popular demand, but these are some of the slowest common ones.

28-Apr-2022 – Picture Window 8.0.286

File Re-Save: now works on older script and workspace script files.

24-Apr-2022 – Picture Window 8.0.285

File/Save Back: fixed problem of sometimes proposing to save in the wrong folder after loading a script.

File/Resave: fixed problem of sometimes proposing to save in the wrong folder after loading more than one script. Unfortunately, fixing the problems required adding new information to script files, so it will not work with pre-existing scripts or workspace scripts.

Added warning of File/Save commands if the current image is not at the end of its branch.

Transformations.pdf: added an example of using the Channel Mixer in the Monochrome transformation.

17-Apr-2022 – Picture Window 8.0.284

Fixed problem with dragging main window to another monitor canceling split screen mode.

Monochrome Transformation: added buttons to quickly scroll through different channels when using Extract Channel or Hue Saturation Method.

6-Apr-2022 – Picture Window 8.0.283

Print Dialog Box: increased initial dialog height to prevent truncating the bottommost control.

27-Mar-2022 – Picture Window 8.0.282

Gradient Transformations: Added most of the blend modes from Composite, Blend, etc. to all the Gradient transformations. Fixed problems with Color Burn, Color Dodge and Linear Burn blend modes for 16-bit images in these transformations. Added Exposure slider and Amount control to Multipoint Gradient transformation to make it consistent with the others.

Updated libraw.dll. This should add support for reading raw files from some newer cameras.

24-Mar-2022 – Picture Window 8.0.281

Fixed several problems with File/Re-Save command. This command is intended to be used when you want to rework an existing image that you saved with a script and then save the modified version over the previous version instead of saving it with a new version number. Re-Save is now only allowed after loading a script created as a side effect of saving an image and the current image has the same original pathname as it had when the script was saved. The command is grayed out unless these conditions are met. This prevents overwriting the wrong image and script when you save. The new command will not work on old script files but will start to work with new script files created by this version (or later) since it requires additional information to be stored in the script file.

21-Mar-2022 – Slide Show Viewer 1.0.8

Slide Show Properties Dialog Box: added Save as Default button which saves the current slide show properties as the defaults for future slide shows.

You can now create and run a new slide show with default settings by simply dropping an image folder icon onto the Slide Show Viewer icon using Windows Explorer.

Added new File/Create Slide Show from Folder command to build a slide show from a folder using the default settings and default slide show name (index.ssi). This is like dropping the folder onto the Slide Show Viewer icon.

Double-clicking on a slide in the Slide Show window now toggles between Fit and Crop. You can still use the keyboard shortcuts F and C.

Fixed problem causing a slide show not to run once it was stopped by pressing Esc.

Fixed installation settings to place executable in the correct folder as a 64-bit application.

20-Mar-2022 – Picture Window 8.0.280

Readout Mode: fixed problems with the display of long captions – they now scroll horizontally.

Raw Develop: fixed problems with processing monochrome files using a camera with a color profile.

Added a 2023 Moon Phase Calendar to the Downloads page of the web site.

Fixed problem causing crash when passing multiple files to PWP from FastStone using its Edit in External Program command.

Hot Spot transformation: fixed problems when using a custom curve and dragging control points that are very close together. Incidentally, I recently discovered this transformation can also be used to remove circular lens flare spots caused by shooting into the sun.

7-Mar-2022 – Picture Window 8.0.279

Mask: added new items to the end of the Mask Settings Menu to let you control how the display is configured when a new Mask dialog box starts up – input only, output only, split screen, or no change.

Ruler Transformation: fixed problem causing last tic mark to disappear in some cases.

5-Mar-2022 – Picture Window 8.0.278

Added new Special Effects/Ruler transformation which can superimpose a ruler over and image. Please see the help file or Transformations.pdf for details.

Fixed problems that could possibly cause a crash when compositing black and white images, depending on the image profiles.

Mask: attempted to make the difference between arrow and cross cursor when clicking or hovering over the input image more consistent.

Measure Tool: initial dialog box location is now in upper left of main image area. Added a button to snap angles to multiples of 45 degrees when measuring lines.

27-Feb-2022 – Picture Window 8.0.277

Magnifier Mode: fixed problems with applying magnifier to the input image if it is not the same size as the output image. Display buttons are now hidden when there is no input image or the input and output images have different sizes.

Added a new mode button to the main tool bar for Measure Mode. This lets you measure the distance between two points in an image as well as the slope angle of the line segment connecting the two points. It also lets you measure the angle between two intersecting line segments. You will need to do a full install to get the new bitmap.

21-Feb-2022 – Picture Window 8.0.276

Mask: the Color Range tool now requires Shift-drag to expand the color range, as described in the help file and Creating and Using Masks.pdf.

Histogram Mode: clicking or dragging on the input image places markers over the histogram – these are now more visible.

Readout Mode: fixed blank caption readout when clicking or dragging on transformation's input image.

Hue Saturation Transformation and Mask Hue Saturation Histogram Tool: fixed misalignment between range slider and brightness histogram.

Magnifier Mode: added a small separation between input and output images when split screen display is selected.

17-Feb-2022 – Picture Window 8.0.275

Mask: fixed problem with mask operations performed immediately after using the hue-saturation histogram mask tool being ignored, when editing a transformation.

15-Feb-2022 – Picture Window 8.0.274

Brightness Curve: fixed problem with amount slider when no mask was present.

Lines, Arrows, Text Tool: fixed problem causing Snap to 45 Degrees button state not being preserved when editing transformation. The Text button now brings up a menu if there is already a text box -- the options are Remove Text Box or Edit Text Box. If there is no text box, a text box is added and a text control window is displayed. Closing the text control window no longer removes the text box.

Hue Saturation Transformation: added black/white buttons that appear when Show Affected Region is checked. Selecting the white button displays totally unaffected regions as white instead of black.

Paint, Smudge, Levels and Color, Clone Tools: Pressing Ctrl-Shift-R instead of Ctrl-R restores the last tool settings without reloading any of the strokes you painted on the image.

13-Feb-2022 – Picture Window 8.0.273

Mask: fixed problems with some mask tools drawing incorrectly when not in split screen mode.

9-Feb-2022 – Picture Window 8.0.272

Color Curves Transformation: when used with a mask, converted to dual amount control and separate set of curves and other settings for masked and unmasked areas, similar to Brightness Curve.

Updated to Icms 2.13.1 color management engine.

Color Balance: the factory defaults for Dynamic Range and White Balance are now Reset and Auto White Balance.

Layout transformation: fixed problem causing crash on startup due to certain recent changes to Amount mask processing.

2-Feb-2022 – Picture Window 8.0.271

Color Balance Transformation: fixed curve painting issues when dragging curve control points.

Mask Dialog Box: fixed several problems with Mask Undo and Redo of certain mask tools in certain cases.

Mask Dialog Box: added new mask tool based on the hue-saturation histogram so you can now use this selection method with any of the transformations that has an Amount control.

Hue Saturation transformation: simplified the process of placing red highlights on the brightness histogram by combining it with selecting colors. Extended the hue change slider range to ± 180 , but the scale is non-linear so the value changes slowly near 0.0 and faster for larger values. Fixed problem causing a crash when creating a mask that uses the Hue Saturation Mask tool. Added Show Affected Region checkbox so you can see what part of the output image is affected by the current selections.

For all transformation dialog boxes with their own preview areas, the preview now updates when you press Ctrl-D. The main image area also updates, but only once you have finalized the preview by clicking the red button just above the preview area.

Amount controls used by Brightness Curve and Mobius transformations now display as two separate sliders when you use a mask. This gives you a visual cue that the Amount controls in these cases work differently. The help file and Controls.pdf have been updated with more of an explanation of the different types of Amount control.

Various transformations that do not take control of the main image area: clicking on the transformation dialog box now lets you zoom or scroll either half of the main image area without holding down Alt. Clicking on any transformation dialog box's title bar or anywhere in a blank area of the dialog box should now finalize any pending mask operations and take control of the main image area.

Clone, Paint & Smudge tools: the arrow cursor is now hidden when dragging the tool to make it easier to see what you are doing. Same for the Mask Paint tool. The Mask Flood Fill tool no longer displays a cross cursor.

The opening in the center of the cross cursor has been enlarged to make it easier to see what it is pointing to.

Reworked a number of the downloadable PDF files to reflect changes to controls and transformations are update obsolete material.

24-Jan-2022 – Picture Window 8.0.270

Hue Saturation Transformation: added a brightness histogram and range slider so you can select colors based on brightness in addition to hue/saturation. Also added a button to compute both histograms based on just the currently masked area, similar to other transformations. For details on the new features, see the help file or Transformations.pdf.

Mobius Transformation: fixed problem causing incorrect application of amount mask when no mask image was present and several other minor user interface issues.

Print dialog box: added a Printer Resolution readout. This displays the actual printer resolution as reported by the printer driver, which may be lower than the advertised printer resolution and may vary with the printer settings. The printer resolution limits the amount of image data the driver will pass through to the printer. Resizing the image to the printer resolution before printing may, in some cases, produce slightly better results than letting the printer driver resize the image itself.

Changed the way File/Re-Save works so it now remembers the image file associated with a saved script (or workspace script) until you either load or save a new script with a different associated image file or clear the workspace.

19-Jan-2022 – Picture Window 8.0.269

Hue Saturation transformation: Hue Change readout is now in degrees instead of percent. Fixed bug causing crash when using probe in HSL mode. Added tool bars to set the selection color to red, green, blue or white and to set the selection display to histogram only/histogram plus selection/selection only. Filled out the description in the help file and added a description of the transformation to Transformations.pdf. There are several new bitmaps so a full install is required.

Mobius Transformation: fixed problem causing shift-clicking on Amount mask box not resetting the output image.

16-Jan-2022 – Picture Window 8.0.268

Added a new transformation: Color/Hue Saturation. Please see the help file for details – Transformations.pdf has not yet been updated. This transformation should be considered experimental at this point and possibly subject to change in future releases. It is based on the hue-saturation histogram and lets you make saturation, brightness and hue changes to images based on selections within the histogram.

Mobius transformation: fixed bug in calculation of Mobius function, so the color wheel is now distorted a little differently.

Added File/Re-Save command to main menu. This command is grayed out unless the current image was previously saved along with its script file and the script was subsequently reloaded. The command then saves the current image with the same name as it was saved under the last time, overwriting the previously saved version. You

still get a confirmation message asking if you want to overwrite the file or choose a different pathname. Use this command after you re-work an image and want to overwrite the previous version with the new version instead of incrementing the version number and saving another copy.

Fixed a problem with an incorrect "last saved as" pathname being stored in script files in some cases. Consequently, when using pre-existing scripts, information about the pathname and date of the saved image file is now discarded when loading a script. The next time you save the image file with a script, however, the correct information will be written out and File/Re-Save should work correctly from then on.

Clone tool: "Missing source image" warning message is now issued only once, even if there are multiple missing images or strokes using the missing image.

10-Jan-2022 – Picture Window 8.0.267

Added new Mobius transformation – a little like Color Balance but more subtle and with more control. Please see the new help file or Transformations.pdf for details. A full install is required to pick up one new bitmap.

Some TIFF files created with very early versions of PWP cannot be read using WIC which is what PWP 8 uses to read them. As a fallback, if WIC fails to open a TIFF file, an attempt is now made to read it using legacy code from earlier PWP versions.

As a side note, it appears that the latest Microsoft TIFF codec now supports reading and writing TIFF files wider than 32,768 pixels. This situation comes up sometimes when creating panoramas by stitching together several high resolution images.

7-Jan-2022 – Picture Window 8.0.266

Fixed problem causing color picker to always start with white, even when editing some other color.

6-Jan-2022 – Picture Window 8.0.265

When entering a number as a formula that is supposed to yield an integer result, if the result of the expression is not an integer, it is now rounded to the nearest integer instead of reporting an error. This comes up, for example, when resizing an image to a different width or height in pixels.

Fixed problems that could cause Clone to crash or behave incorrectly, especially when working on black and white images. Cloning a color image over a black and white image now clones the luminance channel of the color image rather than converting the output image to color. In order to clone color onto a black and white image, first convert it to a color image.

2-Jan-2022 – Picture Window 8.0.264

Color Balance: fixed some problems with curve display and color balancing when a color to add or remove had one or more zero channels.

Color Picker: fixed problems causing the color to be reset when the color picker window was created. Fixed problems with selecting colors from a zoomed-in color wheel and some other minor user interface quirks.

30-Dec-2021 – Picture Window 8.0.263

Color Picker: changed the user interface to make its window resizable and to allow zooming and scrolling of the color wheel. Also fixed a few other minor issues.

Line, Arrow Text Tool: you can now place control points outside the input image.

23-Dec-2021 – Picture Window 8.0.262

Clone Tool: fixed problem with cloning on a black and white image producing a color result unnecessarily in some cases.

Fixed some minor memory leaks.

22-Dec-2021 – Picture Window 8.0.262

Compass control – you can now enter an expression for the angle when you type it in.

File Open: if you delete all the files in the file list, you now get the default checkerboard image instead of an error message.

Multipass Sharpen: fixed memory leak – also a small memory leak in File Open.

16-Dec-2021 – Picture Window 8.0.261

Guided filter: implemented fast guided filter for radius > 3 which speeds up the calculation somewhat. The speedup is even greater if radius > 7.

Preview Tool: if the image being previewed changes size, it now does a zoom to fit. Otherwise, the current zoom and scroll values remain in effect.

Brightness curve: eliminated unnecessary recalculation of the mean image in some special cases.

Brightness Curve, Multipass Sharpen, Add Texture: fixed problem causing Cancel not to correctly restore the initial settings when requested.

Fan: added rotation angle control in Full Circle mode.

File Open: you now get an error message if you try to delete all the files in the file list.

Curve control: the current control point on the curve is displayed as a square instead of a circle.

12-Dec-2021 – Picture Window 8.0.260

Brightness Curve: fixed problem with antialiasing in advanced mode.

11-Dec-2021 – Picture Window 8.0.259

Brightness Curve: fixed problem with running transformation from scripts.

11-Dec-2021 – Picture Window 8.0.258

Crop: fixed problem causing certain resize/resample changes not to propagate to downstream images.

Fixed problems with recalculation order during a batch operation when multiple breakpoints were set.

9-Dec-2021 – Picture Window 8.0.257

Multipass Sharpen: fixed problem with running transformation from scripts.

Fixed minor problem with shift-clicking the white Amount square.

Composite, Warp: minor adjustment to singularity check.

Resize: changing resampling method or bicubic sharpening slider no longer does a zoom to fit.

6-Dec-2021 – Picture Window 8.0.256

Multipass Sharpen, Sharpen/Sharpen More, Unsharp Mask, Adjust, Raw Develop: changed the Sharpen Threshold slider to let you specify a gradual threshold rather than a sharp cutoff. This involves the creation of a new Picture Window control called a Threshold Slider which is used in the relevant transformations. Sharpen threshold sliders now run left to right instead of right to left, consistent with the way they process differences between the input and sharpened images.

Removed threshold sliders from Blur/Blur More, Gaussian Blur and Precise Gaussian Blur as these were confusing and not particularly useful.

3-Dec-2021 – Picture Window 8.0.255, Slide Show Viewer 1.07

Added support for DxO Filmpack 6 plug-in.

In full-screen display, you can now use the up or down arrow keys to navigate up or down the current branch while maintaining the full-screen display. If the current branch contains a splitter, it is indeterminate which branch of the splitter down arrow selects.

Add Texture, Brightness Curve and Multipass Sharpen: added optimizations to reduce unnecessary recalculations.

Slide Show Viewer: fixed problems with certain settings not being saved in index files and problems with toolbar buttons not being ungrayed after loading an index file.

28-Nov-2021 – Picture Window 8.0.254

Composite – fixed problem with compositing 24-bit color images with the Hard Light blending mode.

27-Nov-2021 – Picture Window 8.0.253

Macros in text: fixed problem with Date and Time Taken showing as yyyy:mm:dd instead of yyyy-mm-dd.

Speeded up some internal conversion routines.

Masks: fixed problems with polygon and spline masks for large images.

Brightness Curve: fixed problems with the way black and white curves were handled if the black and white sliders were not set to 0% .. 100%. The black and white sliders now work differently and both default to 100% (see the help file and Transformations.pdf for

details and examples). Now, the black slider modulates the effects of the black curve and the white slider modulates the effect of the white curve. For compatibility, the black and white sliders in pre-existing scripts are automatically updated to 100% .. 100%. This should produce the same results as 0% .. 100% previously. The previous results for settings other than 0% .. 100% were invalid.

Right-click on the bypass icon of a thumbnail in the image browser now closes any open transformation dialog box before forcing a recalculation of the downstream images. This prevents a crash in transformations that have an Amount control, in some specific cases.

22-Nov-2021 – Picture Window 8.0.252

Color Picker: added support for tab keys, now sets focus to the first text control on startup, and fixed problem with text entry delay always 1 sec instead of following the File/Preferences setting.

Text transformation: fixed problems with applying colored text to black and white images and possible crash when closing dialog box.

Level transformation: typing 1 or 2 while the input image is displayed scrolls the input image if necessary and moves the cursor to the left or right end of the reference line. This provides a quick way to fine tune the endpoints while the image is zoomed in. Also fixed a problem that could cause unexpected results when switching to an input image of a different size.

Fan transformation: fixed problem causing output to be reversed left to right for the Full Circle method.

21-Nov-2021 – Picture Window 8.0.251

Added a Preview feature to let you display the results of one transformation while editing another. See the new help file under Preview Window for details and an example.

Multipass Sharpen: simplified the interface for selecting multiple passes. You no longer need to go to the Settings Menu to select the number of passes – it is now fixed at 3. Just use the pass enable/disable buttons to turn off the passes you don't want. In addition, clicking on one of these buttons now selects the tab for the corresponding pass. Tabs for disabled passes are grayed out but can still be selected.

16-Nov-2021 – Picture Window 8.0.250

Brightness Curve: fixed problem with Bilateral/Guided setting not being preserved when re-opening the transformation.

File/Save Back command: if you recently opened a script file, the starting folder for saving is set to the folder containing the script file. Otherwise, the folder holding the original file is used as before. Thus, if you open a file for editing by opening its script file, when you save an image, it will suggest the same folder as the script. If you create an image without opening a script file, it will suggest the folder from which the original image was derived, if any.

12-Nov-2021 – Picture Window 8.0.249

Bilateral Sharpen transformation: added the choice of Bilateral or Guided Filter to the Settings Menu. Guided produces the very similar results and is faster than Bilateral for large radius settings. The Blur Threshold sliders for the two methods have been adjusted to produce similar results, but there are subtle differences between Bilateral and Guided. Guided should produce fewer artifacts when sharpening smooth gradients.

To reduce confusion, Bilateral Sharpen has been renamed to Multipass Sharpen. For compatibility with pre-existing scripts, references to Bilateral Sharpen are automatically renamed to Multipass Sharpen. When loading older scripts, the Bilateral option is automatically selected for backward compatibility, but Guided is now the default when creating new transformations. Pre-existing scripts will continue use Bilateral until you update them.

Bilateral sharpening was also incorporated into the Advanced Mode of the Brightness Curve transformation, the Adjust transformation and the Raw Develop transformation. As in Multipass Sharpen, you can now use the Settings Menu in any these other transformations to switch between Bilateral and Guided.

Added a new document to the Downloads page: Multipass Sharpen.pdf.

Compare transformation: selecting a new Image B no longer resets the scroll and zoom positions or the location of the curtain. This makes it easier to compare Image A against two different Image Bs.

9-Nov-2021 – Picture Window 8.0.248

Fixed problem causing crashes related to mask images inherited from other transformations, accidentally introduced in previous release.

Color Line control: cursor now changes shape when you hover over a tic mark or number. You can now Right Click on a color line to get a menu to add or remove a control point. You only get the remove option if you right click near an existing control point other than the first or last which cannot be removed.

6-Nov-2021 – Picture Window 8.0.247

Fan transformation: added a Method control with two options: Fan and Full Circle. Full Circle is optimized for the special case of wrapping an image to a full circle.

Fixed problem causing crash when loading saved scripts that contain references to alpha channel masks in File Open transformations from other transformations.

Transformations.doc: updated description of Bilateral Sharpen and some of the other sharpening transformations to correct some minor errors and supply additional material.

4-Nov-2021 – Picture Window 8.0.246 and Slide Show Viewer 1.0.6

For certain transformations that support a preview area within the transformation dialog box, added a button just above the preview labeled 2:1 which doubles the magnification of the preview image to make it easier to see fine detail. The affected transformations are: Advanced Sharpen, Bilateral Sharpen, Denoise, Gaussian Blur, High Pass, Linear Blur, Precise Gaussian Blur and Unsharp Mask. You will need to do a full install to get the new bitmap.

Slide Show Viewer: fixed problem preventing Slide Show Viewer and Picture Window from running at the same time.

3-Nov-2021 – Picture Window 8.0.245 and Slide Show Viewer 1.0.5

Moved the Insert Snippet button from main tool bar to an Image Browser tool bar, next to Save Snippet button.

Color Management: fixed problems with Profile Mismatch for Multiple File Open.

File/Preferences: added a setting under On Script Load to warn about or ignore mismatches between the color management settings when the script was created and the current color management settings. Added the option to update color management settings for future sessions when loading a script and a color management settings mismatch is detected. This changes the current settings to match those from the script file.

Slide Show Viewer: Added transition options when advancing from one slide to the next (see the Slide Properties dialog box), added caption size options, fixed several problems and made several minor improvements.

29-Oct-2021 – Picture Window 8.0.244 and Slide Show Viewer 1.0.4

Linear Gradient Transformation: fixed problems with 16-bit B&W images for brightness adjust modes.

Slide Show Viewer: Fixed some memory leaks and memory de-allocation errors that could cause crashes in some cases as well as some other problems. Added multiple image selection and cut/copy/paste of multiple slides.

25-Oct-2021 – Picture Window 8.0.243 and Slide Show Viewer 1.0.3

Image Browser: added a new button to show or hide thumbnail images in the image browser. This compresses the height of the image tree considerably and lets you see more transformations on the screen at once. Click the button a second time to restore the normal thumbnail view. You will need to do a full install to get the new bitmap.

Slide Show Viewer: more progress – implemented some previously unimplemented commands, fixed a number of problems and updated the help file.

19-Oct-2021 – Slide Show Viewer Version 1.0.2

Slide Show Viewer: fixed numerous problems and improved timing of Ken Burns effect.

15-Oct-2021 – Version 8.0.242

Added a new Slide Show Viewer program to the downloads page. See its help file for details. This is an early version which is still a little rough around the edges and lacks some features I am still working on.

Fan transformation: fixed problem causing a line of background pixels to show even if the output image wraps all the way around. To get a seamless join, the ratio of the input image width to height may need to be slightly larger than pi.

Composite transformation: to drag all the alignment points at once, Shift-drag is now sufficient – it used to require Ctrl-Shift-drag.

7-Oct-2021 – Version 8.0.241

Clone tool: removed limitation of not being able to clone color over a black and white images and the corresponding error messages.

File Open: now recognizes and can open files with an .AVIF extension as a variant of HEIF/HEIC. Still cannot save images in any of these formats. You may need to install the AV1 Video Extension from the Microsoft Store to get AVIF files to work.

3-Oct-2021 – Version 8.0.240

Text transformation and Text Control: added Enlarge Text button (next to the running man button). This has no effect on the output image but doubles the size of text displayed in the dialog box to make it easier to read, especially with certain fonts.

Texture transformation: fixed problems with Height displaying incorrect value when editing the transformation and added a Reference Image control to facilitate matching the texture dimensions to those of some other image.

26-Sep-2021 – Version 8.0.239

Mask: fixed problems with display of overlay outline in the Oval Gradient mask tool in some cases.

Grid transformation: added a checkbox to Omit Edges – this suppresses the outermost grid lines.

Text transformation and Lines, Arrows, Text tool: fixed several problems related to drop shadows, offsets, rotated text appearing in the wrong position and text being truncated in some cases.

12-Sep-2021 – Version 8.0.238

Mask: fixed problems with flood fill not working with shift-clicks in some cases when Update transformation with mask was turned on. Turning on Update transformation with mask now triggers an update of the transformation.

Chromatic Aberration: fixed problems with inadequate number of decimal places being used to record slider settings and incorrect display of slider readouts in some cases.

29-Aug-2021 – Version 8.0.237

File/Card to Folder: fixed problems with yyyy/mm.

Mask: added item to Settings menu to update transformation automatically whenever the mask is updated. Previously, in some cases, it was necessary to click the Apply button to get this to happen.

Paint, Clone, Smudge and Levels and Color tools: Undo now preserves the current brush settings – to revert to the settings for the previous stroke, hold down the Shift key while clicking the Undo button or pressing Ctrl-Z.

25-Aug-2021 – Version 8.0.236

File/Card to Folder: added yyyy\mm option when copying by date.

Updated Transformations.pdf and Curves and Histograms.pdf with new examples of lightening and darkening using HSV and HSL.

Brightness Curve: Color Space (HSV/HSL) is now be assigned independently to the Black and White curves. Previously there was a single setting which applied to both curves.

Two-Zone and Three Zone transformations: added an item to Settings menu to select HSV or HSL when adjusting highlights. Default is now HSL, but HSV will be used when processing old script files to maintain backward compatibility.

File/Preferences: added OK and Cancel buttons.

Clone: fixed problems with re-opening transformation after cloning with Recycle set to No.

14-Aug-2021 – Version 8.0.235

Updated to ExifTool 12.30.

Fixed problems with applying text to 48-bit color images introduced in 12-Aug release.

12-Aug-2021 – Version 8.0.234

Text Transformation, Text Control, and Lines, Arrow Text Tool: added the ability to rotate text. The Text transformation also now sets focus to the text control when starting up.

Sliders: double clicks with either Ctrl or Shift depressed are now ignored.

Favorites: modified stored favorites file (Default.favorites) to hopefully avoid incorrect commands being associated in some cases.

1-Aug-2021 – Version 8.0.233

Eliminated warning messages in some cases where a size-specific transformation (Clone, Paint, Smudge, Levels and Color Tool) followed a Crop transformation since the image dimensions could be off by one pixel for large images.

Fixed problems with transformation dialog boxes closing in some cases when clicking on their caption bar, if the place where you clicked was over the image browser. This was a side-effect of a previous feature which I had to remove, at least for now, namely hovering over an image browser thumbnail displays its full caption as a tool tip.

27-Jul-2021 – Version 8.0.232

Paint, Clone, Smudge tools: fixed a problem that, in some cases, caused the results of these transformations to change when recalculated.

Bilateral Sharpen: fixed problem causing overflow in some cases for 16-bit black and white and 48-bit color images and for very large Radius values.

Hot Spot transformation – added option to specify shape of hot spot using a curve. This allows recovery of unusual or more extreme central hot spots in IR images.

21-Jul-2021 – Version 8.0.231

Paint, Clone, Smudge tools: fixed another problem with change to Amount slider or mask not triggering a recalc of subsequent transformations when OK is clicked.

21-Jul-2021 – Version 8.0.230

Warp: Added Scale Only option to Settings menu.

Paint, Clone, Smudge tools: fixed problem with change to Amount slider or mask not triggering a recalc of subsequent transformations when OK is clicked.

Added Help/Keyboard Shortcuts to main menu.

17-Jul-2021 – Version 8.0.229

Color Picker: fixed problem with selecting saturated colors when not in Pastel or Full mode.

Zooming: fixed problem with zoom buttons when a transformation was active, the output image was being displayed, and one of the transformation's auxiliary inputs was selected.

Help file: moved Keyboard Shortcuts to its own topic right after General Tips.

Main menu: added an item to Help submenu for Keyboard Shortcuts so they can be accessed more easily.

15-Jul-2021 – Version 8.0.228

Double-clicking any slider now resets it to the value it had when the current transformation dialog box was last created.

Clone: selecting a Source Image now puts the display into split screen mode and makes the selected image visible in the left half.

Composite: retrofitted extensions from the Blend transformation into the Composite transformation, including Exposure Compensation and Strength sliders as well as all the new blending modes.

10-Jul-2021 – Version 8.0.227

Mode tool bar (Scroll/Magnifier/Readout/Histogram/Palette): fixed problem with wrong button depressed in some cases after dragging the main window to a second monitor.

Fixed image display misalignment for images zoomed in beyond 1:1 and which are not 8-bit black and white.

6-Jul-2021 – Version 8.0.226

All the mode buttons in the main tool bar except Scroll (Magnifier / Readout / Histogram / Palette) now revert to Scroll mode if you click them when they are already selected.

Magnifier Tool: added settings menu to let you toggle Magnifier Tracks Cursor, similar to the setting in the Readout Tool.

30-Jun-2021 – Version 8.0.225

Image Browser: the mouse scroll wheel normally scrolls the image browser vertically, but now if you hold down the shift key, it scrolls horizontally.

Warp: fixed problems with compatibility with pre-existing scripts

Removed some redundant screen repainting in various transformations.

29-Jun-2021 – Version 8.0.224

Warp: added new entries to Settings Menu to determine what happens when you adjust the warp region quadrilateral -- lock scale factor and vary output image size or lock the output image size and vary the scale factor. Also added a Settings Menu item to reset the warp region in batch mode, similar to Crop.

Extended support to all remaining scroll bars for right click menu items to scroll to top/bottom/left edge/right edge.

Gradient Oval, Linear or Sweep: fixed problem that when a color picker was open, interacting with the overlay could cause unexpected behavior.

File New: fixed problem of File New appearing in the image menu of reference images for itself. Selecting it would crash PWP.

25-Jun-2021 – Version 8.0.223

Added missing bitmaps to installer script.

Clone: fixed problem causing crash when selecting a new Source Image.

25-Jun-2021 – Version 8.0.222

Added a new button to the main tool bar (just to the right of the Close All button) that displays all the top-level File Opens in the image tree. For each File Open, the first pathname in its file list is displayed in a drop-down menu. Selecting a pathname from the menu makes its File Open the current transformation. This provides a convenient way to select a file when you have lots of them open at once. Requires a full install due to one new bitmap.

Image menus: fixed problem with down-arrow key not working properly near the end of long lists. Increased the automatic close time delay from 5 to 10 seconds. You can now use the mouse wheel to move up or down the list.

Dropdown menus: You can now use the mouse wheel to move up or down the list.

Image Browser: hovering over a thumbnail displays its full caption as a tool tip. This lets you see, for example, the full filename of a File Open if it is truncated in the thumbnail title bar. Hovering over auxiliary input or mask thumbnails does not display a tool tip.

Masks: fixed problem of a mask being reset when its transformation was reloaded in certain cases where the mask was based on a mask in another transformation.

22-Jun-2021 – Version 8.0.221

Blend, Difference, Filter, Stereo and Watermark transformations now have buttons similar to In/Ov in Composite to let you switch between inputs. You will need to do a full install to get several new bitmaps.

For consistency with adding branches to splitters, new top-level images are now added at the far right instead of the far left.

When an auxiliary input image is selected, it is now zoomed to fit. For transformations where the auxiliary input is important (e.g the Composite Overlay Image), it is also automatically selected as the current image. For transformations where the auxiliary input is less important (e.g. the Frame Inner Mat Texture Image), the main input image remains selected.

In addition to clicking on the title bar or background of a transformation dialog box to restore its control, changing any of its settings now also restores control. I may have missed a few cases on this, so let me know if you find any exceptions. Restoring control to a transformation now always finalizes its pending mask operation, if any.

File/Preferences: added a new On Profile Mismatch setting for multiple file opens.

When saving workspace scripts with image copies and (in File Preferences) Save Script Images As is set to Ask, the dialog box that pops up now has the name of the transformation in its title so you know which image you are saving if there is more than one. There is also a new checkbox to allow applying the current setting to all remaining transformations in the workspace. Finally, I fixed a problem causing files to be saved for all transformations and not just File Opens in some cases.

Transparent PNG: added an Invert Mask checkbox.

Moving a transformation up or down one (e.g. by Shift-Up or Shift-Down) now closes any open transformation dialog box.

9-Jun-2021 – Version 8.0.220

Minor changes to Favorites processing.

Updated to ExifTool 12.26

File Open: if file does not exist and you set a different drive letter, the pathname in the file list is now updated so that when you save the script it contains the new pathname.

Added a third button to the horizontal/vertical split screen tool bar to support automatic selection of horizontal or vertical based on the input image dimensions and the size of the main image area.

One new bitmap requires a full install.

Fixed problems with Alt key deselecting main window on every other key press.

Added support for latest Nik 4 plug-ins.

30-May-2021 – Version 8.0.219

Removed help button from white screen display.

Right-click menu for Image Browser: added item to access Favorites as a submenu. Also you can now use either / or . as a keyboard shortcut to bring up Favorites.

Fixed problems with various transformations not always restoring the hand cursor when closed with color pickers open.

Transformations.pdf – added info on warping images using the Color/Primaries transformation.

The horizontal/vertical split screen setting is now preserved across sessions.

17-May-2021 – Version 8.0.218

Crop: fixed problems with +/- buttons.

Scroll bars in main image area and image browser now respond to Top/Bottom/Left Edge/Right Edge menu commands.

14-May-2021 – Version 8.0.217

Text: fixed problems with applying text to 16-bit or 48-bit images.

Fixed some display issues when using the arrow keys to navigate within the image browser.

8-May-2021 – Version 8.0.216

Now, when you use the Ctrl-D keyboard shortcut and no transformation dialog box is open but there is a current image, its bypass button is toggled. Thus, whether or not the transformation dialog box is open, it switches between the input and output images.

Compare: rearranged controls so Image B dropdown menu does not obscure the current Image A and Image B names.

4-May-2021 – Version 8.0.215

Added a new setting to File/Preferences – On Zoom to Fit. This lets you select what happens when you zoom small images to fit – they are either limited to a magnification of 1:1 or are always magnified to fill the image area. Removed the Shift-click on Zoom to Fit button feature added 2-May.

Fixed problems with restoring display after scrolling by Alt-Dragging image area.

Autorange: added support for RGB color space.

Mask: fixed problems with linear or oval gradient oriented exactly vertically or horizontally.

2-May-2021 – Version 8.0.214

Fixed problem with crash when painting of cloning with a large brush on a very small image.

Shift-click on Zoom to Fit buttons now zooms to fit, regardless of the image size.

Regular click on Zoom to Fit buttons as before zooms to fit, but not beyond 1:1.

Tint: fixed several problems, some of which caused crashing in certain cases with 16-bit gray or color images. Added a section to Transformations.pdf with examples of using Tint to make subtle changes to the look of color images.

Added to Focus Stacking.pdf document.

Rewrote Mask Pinhole Tool – the old version was not working correctly most of the time.

28-Apr-2021 – Version 8.0.213

Compare: switching the compare method now preserves the current zoom and scroll settings.

Mask: fixed serious problems with mask undo accidentally introduced in 8.0.211.

26-Apr-2021 – Version 8.0.212

Crop: fixed problem with crop box going out of bounds in some cases.

Added a new document to Downloads web page – Focus Stacking.pdf.

Updated to ExifTool 12.25.

Histogram Tool – max Expand factor increased from 5.0 to 10.0. Fixed problem with HSL-HS red dots misplaced when clicking on the image.

23-Apr-2021 – Version 8.0.211

Crop: fixed problem with Fit Crop Box to Current View button not setting the crop box correctly in some cases. Fixed problem with crop box going out of bounds when dragging the output image. When dragging the output image, the output image is now updated if you stop dragging for 0.25 seconds. Right-clicking on the input image now pops up a menu to let you reset the cropping rectangle and/or angle.

All transformations that use masks now automatically finalize any pending mask operation any time they update their preview or output image.

Histogram Tool: For 2D histograms (HSV-HS or HSL-HS), the resolution has been increased and empty histogram bins are now grayed out. They are also now displayed as a hexagon, like the color picker, instead of a circle. Also, clicking on the image draws a semi-transparent red dot on the histogram at the corresponding hue and saturation.

20-Apr-2021 – Version 8.0.210

Crop: fixed problem with Fit Crop Box to Current View button not zooming the output image to fit.

Compare: fixed problem with zooming the preview image in and out always resetting the scroll position to the center of the image. The positions of the scroll bars are now preserved when zooming in or out.

Readout Tool: added option to track the cursor or not via the settings menu.

18-Apr-2021 – Version 8.0.209

Added confirmation on Reset from Mask settings menu and from Amount menu.

Amount control: removed Reset from menu if there is no mask to reset.

Copy Card to Folder: fixed problems with Reload Last Settings command, although the Ctrl-R keyboard shortcut cannot be used since it is a modal dialog box.

Compare: fixed problem with scroll bars not being updated on zoom in and out. There is still an issue with the scroll bar position always being reset to the center of the image when you zoom in or out.

Crop transformation was reworked significantly. Dragging a corner of the crop box now resizes it, leaving the center fixed. Rotating the crop box now rotates it about its center and no longer about the center of the image. Fixed other issues with adjusting the crop box when rotated and/or having its proportions fixed.

29-Mar-2021 – Version 8.0.208

Motion Blur: Strength slider now goes up to 500%. Shift-click adds a new control point, Ctrl-click on an existing control point removes it.

23-Mar-2021 – Version 8.0.207

Watermark: added the blending operations from the Blend transformation.

Composite: auto refine alignment points is now available for any number of alignment points (except None).

Motion Blur: added an Amount control to the transformation.

19-Mar-2021 – Version 8.0.206

File New: fixed problem of not picking up image type from reference image in some cases.

Updated ExifTool to version 12.22.

Fixed problem with .snip not being added to snippet filenames when saving.

Mask: when closing the Mask dialog box, the corresponding mask thumbnail caption is now un-highlighted.

Added keyboard shortcuts: F3 and F4 which, if a mask dialog box is open, set the mask mode to Add or Subtract.

16-Mar-2021 – Version 8.0.205

Composite: if overlay image is being displayed, the nudge buttons are applied to the overlay alignment points – if the base image is being displayed, the nudge buttons are applied to the base alignment points. Improved robustness of auto-registration of images that are exposed differently. Fixed problem that could cause mask dialog box to become hidden in some cases. Added Refine button to perform sub-pixel refinement of existing alignment points. Auto-alignment is now always followed by a refine as well. If Auto-Align fails to find a good match, you can set the alignment points manually and then use the Refine button to fine tune the alignment points for a better match. You will need to do a full install to get the new Refine icon bitmap.

Fixed display misalignment for Smooth Display set to No.

Keyboard shortcut Ctrl-D, if a transformation dialog box is open, toggles between displaying the input and the output image. Fixed problems with Ctrl-D keyboard shortcut in some cases.

Paint, Clone, Smudge, Levels & Color Tools: fixed problem of rotated non-circular brush outlines leaving bits of the brush overlay behind when moving the cursor.

12-Mar-2021 – Version 8.0.204

Mask: fixed problem causing crash in certain mask tools when attempting to draw a mask just outside the input image.

Paint, Clone, Smudge, Levels & Color Tools: brush settings now include width and angle buttons, allowing you to make narrow brushes that can be angled to get into small corners. You will need to do a full install to get new bitmaps.

The pathname a script file is saved under is now embedded within the script file. This allows Picture Window, in a future release, to check when opening a script file to see if it has been moved from its original location and adjust image file pathnames referenced by the script accordingly.

10-Mar-2021 – Version 8.0.203

Composite: added an Auto-Alignment button. Auto-Alignment analyzes the base and overlay images and places alignment points automatically in both. This is only implemented currently for 1- and 2-point Alignment methods, and the performance is a little slow, but it is still a work in progress. Future versions will attempt to refine the locations of the alignment points to sub-pixel accuracy. Auto-alignment can fail to find a good match, especially if the images lack distinctive features, include highly repetitive patterns, or if the parts of the subject move too much between images. Future versions may also extend this feature to Stack Images. Full download required for one new bitmap file.

Multipoint Gradient: if Match Input Image is checked, colors are now updated automatically if the input image changes.

6-Mar-2021 – Version 8.0.202

Added tables of contents to all the PDF document files.

File New now lets you specify the image size in pixels, inches, millimeters or centimeters.

Updated to ExifTool 12.21.

Clone: renamed Overlapped to Recycle.

Added new test pattern: Star – used for lens resolution tests.

28-Feb-2021 – Version 8.0.201

Modified RGB Cube and Color/Lookup slightly to support 1-D lookup tables that have a size other than 256.

Checkerboard – Cell Size can now be set to 1 as long as the number of columns and rows are both greater than 1.

Fixed minor display issues causing the top row of pixels in an image not to be displayed in the main image area or in thumbnails. Also fixed some related alignment issues between image and screen coordinate systems.

Readout tool on left button up now returns to the last place you dragged it to – if it has not been dragged, it returns to the upper left corner of the main image area. Previously it always returned to the upper left corner of the main image area. Fixed issues with dragging readout window to a second monitor.

Scratch Removal: fixed some memory leaks.

24-Feb-2021 – Version 8.0.200

Updated to ExifTool 12.19.

Color Curves: Added to ability to load or save 1-D cube files.

Added RGB Cube to Test Pattern menu.

Added new Color/Lookup transformation that can load or save 1-D or 3-D cube files or create custom cube files based on an RGB Cube test pattern image. See updated help file or Transformations.pdf for details.

Composite, Layout, Repeat, Stack Images: fixed problem setting display to output image when an input other than the base image was selected.

19-Feb-2021 – Version 8.0.199

Warp: now only vertices that have been dragged are updated. Fixed minor roundoff issues.

Mask: fixed problem causing crash in some cases when re-opening a mask dialog box.

16-Feb-2021 – Version 8.0.198

Mask: increased the feather width slider range from -256 ... +256 to -1000 ... +1000 pixels. Also fixed problem with finalizing linear and oval gradients in some cases.

15-Feb-2021 – Version 8.0.197

Composite: fixed several problems with typing number keys to position to alignment points and changed the way it works slightly. The first click of a number key simply centers the display on the alignment point. Subsequent clicks of the same number key zoom in and recenter. The regular zoom out button in the main image area zooms out.

Color Line Control: fixed problems with By Luminance command in Settings menu.

Upgraded to latest Icms 2.12 maintenance release.

Fixed crash in some cases when using freehand tools at or outside the edge of the output image.

The caption of the Mask dialog box, if the mask was created starting with some other image or mask, now includes the name of the initial image. This gives you a way to tell, after the fact, which image (if any) was originally used to initialize the mask.

5-Feb-2021 – Version 8.0.196

Multi Color Balance: fixed problem with default file extension when saving color curves.

Composite: When there is an overlay image defined and at least one alignment point, then typing the number of an alignment point zooms in the input or overlay image (whichever is currently being displayed), centered on the alignment point to the extent possible. Typing the same number repeatedly keeps zooming in deeper and deeper.

Switching between base and overlay images no longer does a zoom to fit so you can flip between two zoomed images. If Alignment is set to Shift/Rotate/Scale, a third nudge

tool bar is now displayed to let you expand or shrink the overlay image by small increments.

31-Jan-2021 – Version 8.0.195

Edit/Paste Image from Clipboard and Edit/Drop Image from Clipboard: fixed main menu graying problems.

Right clicking on an image in the main image area (or, if in split screen mode, on the image in the right half of the main image area), now brings up a new popup menu. Previously it was the same menu as right clicking on a thumbnail in the image browser. The new menu includes: Image Info, Display Full Screen, Zoom to 1:1, Zoom to Fit, Save As, Export, Copy to Clipboard, and Print.

Minor adjustments to user interface element spacing for consistency.

Updated to ExifTool 12.16.

27-Jan-2021 – Version 8.0.194

Compass control now has an angle readout in the center and lets you enter angles in degrees. Compass controls are currently used in the Drop Shadow control and the Emboss and Linear Blur transformations.

Drag and Drop files: If you drop files into the main image area, each one becomes a new top-level image (unless they are already open). If you drop files into a File Open dialog box (the PWP dialog box, not the Windows dialog box), the pathnames of the files are added to the current file list. Previously, this happened if a File Open dialog box was open and you dropped files into the main image area.

Pasting files now supports the format used by Windows Explorer and FastStone, namely CF_HDROP. This is similar to drag and drop in that only the pathnames are placed on the clipboard. The advantage of this clipboard format is that it can handle large files efficiently since it does not need to make copies of the image data. Although you can copy multiple image files to the clipboard in CF_HDROP format, Picture Window can only paste one image at a time – to copy multiple files use drag and drop.

Added a new Edit command: Drop Files from Clipboard – this is grayed out unless a pathname list is on the clipboard in CF_HDROP format. If there is a pathname list, it simulates dragging and dropping the files in the list into the main image area or, if a File Open dialog box is currently open, into the File Open dialog box.

Monochrome transformation: the 8/16 buttons are now hidden unless the input image is 8 bits/channel.

24-Jan-2021 – Version 8.0.193

After geotagging, a status dialog box is now displayed that captures any warnings, error messages or summary information resulting from the geotagging process.

Raw Develop: fixed problem of curve histogram not being displayed initially if no corrections are being made.

Add profile for Sony 55mm f/1.8 ZA lens.

Fixed problems with cursor incorrectly reverting to crosshair after clicking OK on a number of different transformations.

File Save: Added a refinement to the way original pathnames are determined. The original pathname of a top-level transformation other than a File Open or Copy was previously undefined. Now, if the top-level transformation has exactly one input, the filename associated with that input becomes the original pathname. So, for example, if a Layout or Stack Images incorporates one or more copies of the same image and no other images, its original pathname is the original pathname of its single input image, and a version of this original pathname is used to generate the default filename. If a transformation has no inputs or more than one input image, the original image is undefined as there is either no metadata to save or it is ambiguous which metadata to save.

21-Jan-2021 – Version 8.0.192

Mask Fill Tool and Fill Transformation: rewrote to avoid potential stack overflow problems for large, complex fill regions.

Mask: fixed memory leak when re-opening a mask dialog box.

Image Info: fixed problem with Taken date display – month number was off by one.

Card to Folder and Geotag Folder: fixed various geotagging problems for some cases and added new options to set time zone offset from GMT and save originals. See help file for details.

Updated to Exiftool 12.15

14-Jan-2021 – Version 8.0.191

When using Shift-Up Arrow or Shift-Down Arrow or the Edit/Move Up or Edit/Move Down commands, you can now move the current image up or down past side branches and splitters. When you move down past a splitter, Picture Window asks you which branch you want to move the current image to. When you move up past a branch, the image is moved past the corresponding splitter as well.

7-Jan-2021 – Version 8.0.190

Line/Arrow tool: applying text or border color to a B&W image now uses the luminance of the color to select a gray level – previously it used the red channel. This makes it consistent with what happens with the line/arrow color. Fixed problem causing existing control points and text box overlay not to be displayed on startup in some cases. Also fixed several problems with applying text boxes to 16-bit B&W or 48-bit color images.

Text Transformation and Lines, Arrows Text Tool: added a new text justification tool bar distinct from the Alignment control. Now you can independently set the justification of multiline text (left/right/center) vs the alignment between the text box and the control point. This change requires a full install to get 3 new bitmaps.

Updated to Exiftool 12.14

4-Jan-2021 – Version 8.0.189

Fill tool: added Remove All Control Points to Settings menu.

Favorites: fixed problem with Rotate-Mirror in the default favorites you get if you have never run Picture Window. If you already have a favorites file, you can fix it by removing Rotate-Mirror and adding it again. The correct name is Rotate/Mirror which should show up instead.

Updated to Exiftool 12.13

Raw Develop: fixed problems with incorrect curve and/or histogram displayed in some cases.

31-Dec-2020 – Version 8.0.188

Fill tool: fixed residual problems with creating and dragging control points leaving cross behind or showing multiple control points as current.

Mask: fixed crash in some cases when closing Mask dialog box with a mask tool active but not yet finalized.

30-Dec-2020 – Version 8.0.187

Create Profile: added correction for non-uniform target illumination (assuming a bilinear brightness model) and adjusted thresholds for reporting clipped whites or blacks. Fixed problems reading HCT reference files. Fixed problem of Build Profile button not working right after open the transformation dialog box for editing. Fixed problems with running Create Profile from a script.

Fill, Speck Removal and Scratch Removal tools: fixed error when copying transformation if it had a mask.

Fill tool: fixed dragging current control point not dragging the cross.

27-Dec-2020 – Version 8.0.186

Line/Arrow/Text Tool: To make it easier to edit control points, you can now right-click on the input image and select one of four commands from a popup menu. The commands are: Add a control point, Add a new line/arrow/text, Remove control point, Remove entire line/arrow/text.

Geotagging is now incorporated into the File/Copy Card to Folder command. This is done using ExifTool which can extract location data from an optional GPX file you supply and add it to the image file metadata for all the files in a folder.

New File/Geotag Folder command: similar to the above but you can geotag any image folder you want as long as you have the corresponding GPX file.

Added ProPhoto.icm to the list of ICC profiles Picture Window installs when it starts up. You will need to do a full install to get this profile.

22-Dec-2020 – Version 8.0.185

Fixed problem with Mask dialog not getting control when it starts up from some transformations.

22-Dec-2020 – Version 8.0.184

Added an eyedropper button to the color picker that lets you toggle its probe on and off. Initially, the button is raised, and the color picker does not take control away from the current transformation dialog box when it starts up. When you depress the eyedropper button, the color picker probe is activated, and clicking on the input or output image sets the color picker color. When you click the eyedropper button again to de-activate the probe, control is restored to the current transformation dialog box, if any. This adds an extra step when you want to select a color by clicking on it, but avoids having control removed from the transformation dialog box every time you open a color picker. If you have multiple color pickers open, activating the probe in one of them automatically de-activates it in the others.

Theme dialog box: fixed problem with wrong color displayed in quick pick unused button background.

Added file extension checks to various commands which save files that must have a specific extension.

Readout Tool changes: If you sample a point in the output image of a transformation currently being edited, when you stop dragging, the readout window snaps back to the upper left corner of the main image area. Subsequent changes to the output image at the sampled location caused by modifying the transformation settings will now cause the readout window to be updated as the output image changes. If no transformation is being edited and you click on an image, updates to that image (by changing one of its upstream transformations) are displayed in the readout tool window. Closing the image the readout tool is monitoring also closes the readout tool. To make it clear which image was sampled, the readout tool now displays the caption of the sampled image.

19-Dec-2020 – Version 8.0.183

Added a new item to the Theme dialog that can be customized – the border color of depressed tool bar buttons. Setting it to white make the border the same color depressed or undepressed. Setting it to red makes depressed buttons have a red border.

Printing: fixed a couple of problems with tiled printing – preview did not update when changing the tile settings and Auto rotate was not always working correctly for tiled printing.

Stereo: added a slider to let you rotate the left and right images with respect to each other before combining them.

14-Dec-2020 – Version 8.0.182

Gradient transformations: switching display mode (input/output/side-by-side) now closes all color pickers. This guarantees the overlay on the input image remains displayed.

Closing images: if all the images being closed are bypassed (and none is a splitter or side branch) the remaining images are no longer recalculated since they are unchanged.

Status messages now have a yellow background to make them stand out.

Add Favorites button to main tool bar which brings up a Favorites dialog box. The Favorites dialog box displays a list of commonly used transformations you can customize with your personal favorites. Similar to Quick Pick but the selection is limited to the transformations you configure. To get the favorites bitmap for the main tool bar, you need to do a full install. You can also get to the Favorites dialog box by typing "/" when no other dialog box is active.

9-Dec-2020 – Version 8.0.181

Updated ExifTool to version 12.12.

Fixed problem causing the mouse scroll wheel to be ignored in some cases, even with the Alt key depressed.

In Amount controls, a Reset menu option is now available even if there is no Amount Mask. This lets you reset the slider to its default value.

Crop: fixed problem causing flashing when moving the cursor over the output image.

7-Dec-2020 – Version 8.0.180

Updated ExifTool to version 12.11.

File/Export command and transformation: fixed problem with First File Name not being displayed after editing the transformation or loading a settings file.

Crop: you can now click and drag on the output image to move the cropping rectangle.

File Export: fixed problem with error message when exporting BMP files.

2-Dec-2020 – Version 8.0.179

Stack Images transformation: fixed crash with 16-bit black and white and 48-bit color input images.

Frame transformation: clicking on a part of the image preview now automatically selects the correspond tab and displays the settings for the part of the image you clicked on.

2-Dec-2020 – Version 8.0.178

Create Lens Profile: improved reliability of registration point location algorithm.

Added lens profile for Tamron 70-180 f/2.8 for Sony full frame.

Create Profile: fixed problem causing error message if RGB working color space was set to None.

Clone, Paint, Smudge, Levels and Color Tools: fixed problems with undo incorrectly restoring previous settings.

29-Nov-2020 – Version 8.0.177

Raw Develop: fixed problem causing the curve histogram not to be displayed when editing the transformation.

Fixed problem of missing lens info for some cameras (e.g. Sony RX-100).

Mask: fixed problems with changing the mask mode when no mask operation is pending. Also fixed crash on closing mask dialog box in some cases.

Added some micro 4/3 camera and lens profiles.

27-Nov-2020 – Version 8.0.176

Fixed problem in Google Maps lookup in Image Info for locales that use a character other than a period as a decimal point.

Create Lens Profile command: fixed problem with some cameras not storing Lens Model in their raw file EXIF data. If Lens Model is missing, ExifTool is now called to determine the Lens ID from the Maker Note metadata instead. Also added progress indicator so the command can be canceled.

Create Profile: restored missing Expand Target Dynamic Range option to Settings Menu. Rebuilt all camera profiles using the Expand option.

Illegal filename characters in camera make or model or lens model are now replaced with underscores when generating default names for camera and lens profiles.

24-Nov-2020 – Version 8.0.175

Raw Develop: added options to automatically select lens and camera profiles based on raw image metadata.

Warp transformation: fixed some additional off-by-one errors.

New document available: Geotagging Images.pdf.

22-Nov-2020 – Version 8.0.174

Added some new camera and lens profiles.

Create Lens Profile command: minor adjustment to certain thresholds to improve registration point recognition for images less than full brightness.

Fixed problem of displaying ampersands as underscores in filenames in captions in the main image area and some other cases.

New document available: Image Stitching for Panoramas.pdf.

Rebuilt all camera profiles after creating a custom reference file for my ColorChecker SG.

Fixed problem on startup occasionally causing a second instance to be created when PWP was launched multiple times in rapid succession.

19-Nov-2020 – Version 8.0.173

Adjust and Raw Develop transformations: fixed problem causing curve to be applied twice if a color correction was also specified.

Adjust transformation: fixed problem with the four buttons at the top of the dialog box that turn different sets of settings on and off not working.

18-Nov-2020 – Version 8.0.172

The Create Lens Profile command and Raw Develop transformation are now available to try out. They are both still works in progress as I am still tinkering with them. I have included a few camera and lens profiles – I will try to add some more in future releases, especially for Sony full frame and Micro 4/3 which is mostly what I have here.

Breakpoints on bypassed transformations are now ignored.

Mask Feather progress bar now has a Cancel button.

Create Profile: Added an alternate set of reference files for SpyderCheckr 24 and 48 as the standard reference file did not accurately match my copy of the target.

Raw files: when opening raw files, the camera white balance setting at the time the photograph was taken is now applied to the image. This improves color rendition considerably, but it changes the way pre-existing scripts process raw files.

Warp: fixed off-by-one error in image size when editing an existing transformation.

Lens Profile Target: fixed problem causing target width not to be restored correctly when editing the transformation.

9-Nov-2020 – Version 8.0.171

Added minimize icon to Batch Progress dialog box.

Upcoming new feature: Lens profiles – used to correct for vignetting, distortion and chromatic aberration in raw files. For details, see new document: Lens and Camera Profiles.pdf.

- Added a new test pattern transformation (Lens Profile Target) used for creating lens profiles.

- Added File/Create Lens Profile command for creating lens profiles – still under construction.

- Added Raw Develop transformation for applying camera and lens profiles to raw images as well as making tonal and color adjustments and sharpening – still under construction.

LibRaw updated to version 0.20.2.

Image Info: fixed problems with camera make display.

Added button to main tool bar for File/White Screen command.

Scripts: fixed problems with saving comments for side branches.

Added a red tint to the edges of depressed tool bar radio buttons.

27-Oct-2020 – Version 8.0.170

Fixed problem with incorrect naming of images folder when saving scripts or workspace scripts with image copies and when the script or workspace script pathname had multiple extensions (e.g. test.1.script). This also was causing a problem when doing a File Save with the Include Workspace Script with Image Copies option.

23-Oct-2020 – Version 8.0.169

Fixed problem in image browser when Alt-Clicking on a thumbnail in the image browser to view a new image with the same zoom factor and scrolling location as the current image. Previously this did not work if one of the images was bypassed and the other was not.

Fixed problems with comments on side branches and splitters.

20-Oct-2020 – Version 8.0.168

You can now attach a comment to any transformation, splitter or side branch. When a comment is present, ... is displayed just below the X in the image browser thumbnail at the right end of the caption bar. Comments are entered, viewed or edited along with captions in the Change Caption or Comment dialog box that lets you change the caption, the comment or both. Bring up this dialog box by right clicking on the thumbnail or main image and selecting it from the popup menu, or by clicking on the ... icon. Comments are saved in scripts and restored when the script is reloaded.

16-Oct-2020 – Version 8.0.167

Levels and Color Tool: fixed problem causing crash when tool was used with an Amount mask.

15-Oct-2020 – Version 8.0.166

Image browser: fixed problem causing image browser to close unexpectedly when it was configured as a separate window and the Change Name dialog box was closed.

Mask: fixed problem causing crash in some cases when loading a script using masks.

14-Oct-2020 – Version 8.0.165

Light Falloff: greatly improved the accuracy of automatically computed correction curves from a sample image. Added options to darken center, lighten corners or both.

Mask: fixed problem of not taking control of the mouse cursor in some cases when switching mask tools.

11-Oct-2020 – Version 8.0.165

Mask Paint Tool: fixed problem causing initial shift-click on input image to not paint.

File Open: fixed problem causing PWP to ask on profile mismatch even if set to convert without asking.

Levels and Color transformation: added items to Settings menu to let you adjust the dynamic range and auto white balance thresholds.

Readout tool: added red, green and blue highlight/shadow warning indicators.

7-Oct-2020 – Version 8.0.164

Change Profile: fixed problem making it impossible to change an image's profile to a scanner (scnr) profile even when only the profile was being changed.

Create Profile: made minor adjustments to better align the overlay grid with the target image for SpyderCheckr targets. Error message about gray patches out of order is now a

warning instead of a fatal error. Performance improvements in conversion to working color space.

Curve control: added Autorange to Settings menu if the associated channel is HSV V, HSL L, R, G, or B.

File Preferences: Added setting for Save Script Images As to permit specifying what format image files are saved in when you save a script or workspace script with image copies. The default is uncompressed TIFF.

4-Oct-2020 – Version 8.0.163

Export: fixed problem causing script file (if selected) to overwrite image file. Also fixed File in Use error when attempting to re-open the exported script.

4-Oct-2020 – Version 8.0.162

Match Reference and Create Profile: added support for Datacolor SpyderCheckr 24 and SpyderCheckr 48 targets. Also fixed some problems in Create Profile transformation causing it to produce an incorrect output image in some cases (the saved profile was OK). If you want the reference files for Create Profile, you need to do a full install.

Export: fixed problem causing a superfluous asterisk to be inserted into the filename if the Ask option was specified.

Mask Paint tool: fixed problem of spurious line being drawn after right-clicking on the input image.

30-Sep-2020 – Version 8.0.161

The previous fix for un-bypassing bypassed transformations caused an unwanted side effect – namely toggling bypass in the image browser always made the transformation recalculate. A better fix was implemented for this release.

30-Sep-2020 – Version 8.0.160

Fixed problems with un-bypassing bypassed transformations saved in scripts after the script was reloaded.

Fixed problems when saving or exporting image files, the associated script file (if any) was being saved without the image file extension. For example, the script for **a.tif** should be named **a.tif.script**, not **a.script** – this is necessary since the same file might be saved with scripts in two different file formats which would overwrite one of the script files. I'm not sure when this started happening or why I changed it and possibly something else will stop working correctly as a result.

29-Sep-2020 – Version 8.0.159

Oval Gradient Mask Tool: now supports rotated ovals similar to the Gradient transformation. It also now preserves the center location when you resize the oval.

27-Sep-2020 – Version 8.0.158

Improved the way XORed text is displayed in various transformation overlays. It should make text more visible against a range of different background colors.

Oval and Sweep Gradient Transformations now label their input image overlay with the number of each control point in the color line or curve.

Linear Gradient: for clarity, Linear has been renamed to Skew.

In the Copy SD Card to Folder dialog box, the Copy button is now the default pushbutton and is thus activated when you press the Enter key. This shortcut is convenient just after entering in the folder you want to copy to.

25-Sep-2020 – Version 8.0.157

For a number of transformations that have their own previews (e.g. Advanced Sharpen, Bilateral Sharpen, Gaussian Blur, Unsharp Mask, etc.): fixed problems causing unnecessary recalculation of the output image when editing the transformation or when flipping between the input and output image display.

File Preferences: added setting the length of the recent files list and whether it shows up in File/Open Recent or at the bottom of the File menu.

24-Sep-2020 – Version 8.0.156

Shortened the length of the File menu by relocating the list of recently opened or saved image files, scripts or workspace scripts from the end of the menu to a new Open Recent... submenu.

22-Sep-2020 – Version 8.0.155

Mask: fixed remaining problem with using an image that is not black and white as an initial mask.

21-Sep-2020 – Version 8.0.154

Mask: using an image that is not black and white as an initial mask is now detected and treated as though there is no initial image. This can happen in the event you initially select a black and white image which you later change to a color image.

The running man button is now red when active and grayed when disabled in the Mask dialog box and in those transformations that have their own preview and use it to synchronize the output image with an updated preview. This makes it easier to see updated settings have not yet been processed. The same buttons are used in the Text transformation and the Text control to signal that the text has been modified.

A full install is required to get the updated bitmaps.

20-Sep-2020 – Version 8.0.153

Light Falloff: Fixed problem with curve not updating on Reset in the Settings menu. Also the curve Reset button now resets curve the same as Reset in the Settings menu.

Masks Transformation: added the ability to set the output image to the input image, one of the four masks, or the union, difference or intersection mask 1 and mask 2.

Added Insert Snippet After... to image right click menu.

19-Sep-2020 – Version 8.0.152

Fixed problem with transformations not propagating changes if they were set to display only the input image, saved, re-opened for editing, modified and then OK clicked.

Adjusted location of status display so it does not get overwritten by progress indicators.

Levels and Color: reworked to fix structural issues with the previous implementation. It now produces results more or less identical to Color Balance when doing Auto White Balance, and it also works predictably when applied to different images. The previous Color Balance control has been replaced with Remove Color and Add Color controls similar to the way Color Balance works. It should still work with old scripts since the old Color Balance color is mapped to the new Add Color and the new Remove Color defaults to white.

If you want Levels and Color to auto white balance, you set Color Balance to Auto White Balance -- this will white balance the current image and all subsequent input images. To white balance only the current image, you then set Color Balance to Custom, at which point subsequent images with color balance consistent with the current image and not be rebalanced.

Similarly with dynamic range which can be Custom, Reset, or Full. Custom means the markers stay in the same place for subsequent images. Reset means the markers are set to align with the tic marks for subsequent input images and Full means the markers are set to pure black and white for subsequent images.

18-Sep-2020 – Version 8.0.151

Fixed problems with clicking OK or Apply in transformations when a mask dialog box was open with a pending mask operation.

17-Sep-2020 – Version 8.0.150

Levels and Color: fixed problem with "Don't set dynamic range on new input" command.

17-Sep-2020 – Version 8.0.149

Rearranged Theme dialog box to make it smaller.

Levels and Color: added Full Dynamic Range and Auto White Balance buttons as well as some new items to the Settings menu. It turns out that there was a bug in Levels and Color in that color balance was being applied before dynamic range changes but the locations of the tic marks were based on the original image and not the color balanced version. This has been fixed, but existing scripts may not work quite the same as before if the color balance color is not white. The new items in the Settings menu control what happens when you apply the transformation to a new image or when the transformation starts up. This makes it more useful in batch operations when you want to auto white balance and/or expand dynamic range for a sequence of different images.

A similar fix was also made to the Levels and Color Tool, so changing its color balance now adjusts the dynamic range tic marks.

Fixed resource leaks in Mask that could crash after a long series of operations such as applications of the Spline and other mask tools.

15-Sep-2020 – Version 8.0.148

Added Themes to allow customization of colors of various user interface elements. To select or edit themes, use the new Theme... button at the top of the File Preferences dialog box. For details, see the new help file.

Show Clipped Highlights & Shadows: fixed algorithm for Any/All Channels Clipped and changed icons to be more intuitive.

Theme and Font Size are now accessed via buttons in File Preferences. Dependency Colors was removed from File Preferences as this can now be handled via a custom theme. Workspace color was also removed as it is now part of the current theme.

New help file, bitmaps and theme files require a full install.

Tint: fixed problem with 16-bit black and white input images.

14-Sep-2020 – Version 8.0.147

Opening Raw Files: Output images are now 48-bit color (or 16-bit black and white) instead of 24-bit (or 8-bit) – also disabled auto brightening which was causing some images to be significantly overexposed. Added support for some of the raw metadata fields displayed in Image Info command – LibRaw does not provide access to the others. The full EXIF metadata is filled in when the raw file is saved as a TIFF or JPEG.

Color Management Dialog Box: added settings for Assumed Camera Profiles (color and gray) which are assigned to raw files when they are opened. If you want, you can create a custom profile for your camera if you have a suitable target, by using the Create Profile command.

Reworked the Confirm Profile Conversion dialog box that pops up when there is a mismatch between the file profile and the working color space. You now have the option of converting from a custom profile rather than the embedded file profile. This can be helpful if you are loading a raw file and want to use a particular profile for it other than the Assumed Camera Profile currently set in the Color Management dialog box.

12-Sep-2020 – Version 8.0.146

Added basic support for opening raw files via the File Open command (and its variants) by incorporating LibRaw.dll, a copy of which is now installed alongside PWP. This library is updated from time to time to support new cameras, but there are typically delays before the latest cameras are supported. The list of currently supported cameras can be viewed at <https://www.libraw.org/supported-cameras>. Raw files are currently read without modification, like what you would get from dcrw using its default settings, you can modify them later using PWP's transformations. No noise reduction is performed, no corrections are made for lens distortion, light falloff or chromatic aberration, and no ICC profile is assigned to the image. I have not yet added code to read metadata so it will not show up under Image Info. However, it should be copied from the raw file by ExifTool when you save the image as a TIFF or JPEG. I will be adding support for at least some metadata in future releases and consequently image appearance may change

slightly, so I recommend considering this a test feature and not using it for production processing yet. Previous support for DNG files via Adobe's DNG codec has been removed – DNG files are now supported as raw files.

Tuned quick pick grayed-out colors for better appearance and removed Adjust Tool button that should not have been there.

11-Sep-2020 – Version 8.0.145

Minor tweaks to main menu item highlighting.

Quick Pick buttons now match workspace background color. Fixed problems with quick pick button text vertical centering and failure to increment use counts for File Open, File New and Paste commands.

9-Sep-2020 – Version 8.0.144

Fixed resource leak accidentally introduced in 8.0.143.

Paste transformation: when run from a script and no image is present on the clipboard, a dummy 320x240 gray and white checkerboard image is pasted instead of issuing an error message.

8-Sep-2020 – Version 8.0.143

Changed the background of the image area caption to match the image border color. Changes to the image border color are also now reflected in image browser thumbnails.

Added a setting to File Preferences to set the workspace background color. This controls the color of the menu bar, the background behind the main tool bars, and the background of the image browser. The main menu is no longer implemented as a standard Windows menu in order that its background and text colors can be changed – the differences are relatively minor but it does behave slightly differently in some cases. Also, the font and text of the main menu gets larger or smaller as you change Picture Window's Font setting. The image border color still controls the background color of the image areas independently from the workspace color. Setting both the image border and workspace colors to black creates a dark theme similar to other image editing software.

6-Sep-2020 – Version 8.0.142

For consistency, reversed the direction of Threshold sliders in the following transformations and tools: Adjust (Sharpen Threshold), Bilateral Sharpen (Sharpen Threshold), Remove Purple Fringe (Threshold), Sharpen (Threshold), Unsharp Mask (Threshold), Watercolor (Sharpen Threshold), Mask Pinhole tool (Threshold). Now, moving the threshold slider to the right always increases the strength of the underlying transformation (or mask tool).

3-Sep-2020 – Version 8.0.141

Mask Curve Tools: fixed problem of curve probes becoming unresponsive after moving the Mask dialog box.

2-Sep-2020 – Version 8.0.140

Mask Range Tool: the probe now stops responding if you move it outside the input image. Also, Ctrl-Click on the input image is now a shortcut for clicking the Contract button.

Mask Hue Saturation Tool: fixed problem of probe becoming unresponsive after moving the Mask dialog box.

Moved Change Profile up one level in the main menu from Gray.

29-Aug-2020 – Version 8.0.139

Clone, Paint and Smudge Tools: Changed the way Undo works to reduce memory usage and modified the way the screen updates as you paint strokes. Fixed a problem with Undo not removing the first stroke in some cases.

Distort: current control point is now displayed as a filled circle.

Color Picker: fixed problem of the pastel mode color wheel being displayed incorrectly for saturated colors. It now switches automatically to full mode if the color is more than 50% saturated.

Color Line Control: added Make All Colors Gray to Settings menu. This converts all colors to a neutral gray of the same luminance. Also added By Luminance to Settings menu. This sorts the colors by their luminance and positions them to make the luminance of the color line vary linearly from one end to the other.

Tint Transformation: Added Brightness Channel and Blending Mode controls. See the update help file or Transformations.pdf for details.

Batch processing – the Batch progress dialog box is now left visible when reaching a breakpoint so you can tell which file is being processed.

Level Transformation: the control points are now constrained to stay within the input image.

26-Aug-2020 – Version 8.0.138

Distort Transformation: For Shepard method, added the ability to assign weights to individual control points.

Paint Tool: Added Color Burn and Color Dodge painting modes.

Levels and Color Tool: Changed the way Undo works to reduce memory usage and modified the way the screen updates as you paint strokes. Fixed a problem with Undo not removing the first stroke in some cases. Fixed some spacing issues in the dialog box.

25-Aug-2020 – Version 8.0.137

Fixed problem causing bypassed transformations read in from scripts or snippets to perform a redundant recalc in some cases.

Changed the way transformation and mask dialog boxes are minimized. They now place icons on the task bar when you create them. Clicking the icon or the minimize box to hide the dialog box; click the icon to restore it.

Multi Color Balance: Ctrl-Click or Ctrl-Shift-Click on input image sets the selected color set as both the color to add and the color to remove. This is useful if you just want to add a color cast. See the updated help file or Transformations.pdf for details (especially the last Tip).

Paint Tool: Added Soft Light and Hard Light painting modes.

20-Aug-2020 – Version 8.0.136

Show Clipped Highlights/Shadows is now reset at the beginning of every session.

Fixed problem when copying images that caused the bypass setting to sometimes not be copied correctly.

Mask: fixed problem with feather width slider display.

19-Aug-2020 – Version 8.0.135

Mask Feather Tool: Increased maximum feather radius to 256 pixels and made the slider nonlinear so you can still select small values easily.

Fixed problems with Grid control display in the main tool bar.

17-Aug-2020 – Version 8.0.134

Created a new document: IR Photography.pdf which contains information on how to take digital infrared photographs and how to process them using Picture Window.

Grid and Crop Composition Guides: Added Circular grids which display a polar coordinate grid over the image.

Rewrote the internal routine used by Bilateral Sharpen and several other transformations to use a faster algorithm.

Removed support for CUDA as it was not speeding up the program significantly and was only being used in a few situations, the last holdout being bilateral sharpening.

15-Aug-2020 – Version 8.0.133

Copy Card to Folder: Fixed formatting error in final confirmation message box.

Text transformation and Text control (used by Line, Arrow, Text tool): In addition to an Alignment setting, there is now an Offset setting (hidden if Alignment is set to Center) which adds space between the text bounding box and the alignment point. In the Line, Arrow, Text tool, this lets you move the text away from the arrow when the text background is transparent.

14-Aug-2020 – Version 8.0.132

Composite: overlaying an image with itself now displays alignment points the same way as when overlaying with a different image.

Fixed problem with crash recovery sometimes restoring the wrong workspace file.

Brightness: fixed problem causing crash in some cases when run from a script.

13-Aug-2020 – Version 8.0.131

Fixed minor spacing problems with main image area.

Added snippets – for when you find yourself inserting the same sequence of transformations over and over. A snippet is a series of transformations you can save in a file and then insert after the current transformation. For details, see the updated help file or Scripts.pdf. There are two new bitmaps -- you will need to download the full installer to get them.

11-Aug-2020 – Version 8.0.130

Added two bitmaps accidentally omitted from previous version.

11-Aug-2020 – Version 8.0.129

Added a tool bar at the top of the main window to select horizontal or vertical split screen. The tool bar is grayed out unless the screen is split.

File Preferences: removed autosave setting – autosave is now always on.

When restarting after a crash or some other abnormal termination, PWP now asks if you want to load the last autosaved workspace.

Mask: Save/Combine (from the settings menu) now ask if you want to finalize any pending operations. Also fixed problems with rebuilding saved/combined masks.

10-Aug-2020 – Version 8.0.128

Mask flood fill tool – increased stack size by a factor of 16 to avoid crashes in some cases when using this tool on very large images.

9-Aug-2020 – Version 8.0.127

Added support for creating 16-bit masks via a new 8/16 tool bar in the Mask dialog box. All transformations were also updated as necessary to work with 16-bit masks. Fixed several minor problems in the mask dialog box.

Mask Median Tool: Fixed problem causing mask not to update when threshold slider was moved.

Amount Menu: Reordered menu items so an accidental double click does not launch help.

When copying files from a camera card to a folder, Picture Window now issues a confirmation message issued when done.

Made some minor changes to hopefully eliminate 1-second blinking on some computers.

2-Aug-2020 – Version 8.0.126

Mask Flood Fill Tool: A control point is now displayed where you clicked on the input image to identify the flood fill starting point. The control point is hidden when you finalize the flood file by clicking the Apply button.

1-Aug-2020 – Version 8.0.125

Mask: Clicking Apply when using the Flood Fill tool no longer switches back to the Freehand tool. When using the Flood Fill tool, Shift-clicking on the input image instead of just clicking on it applies and pending mask operation before doing the flood fill. This lets you perform several flood fill operations in a row without having to apply each one.

31-Jul-2020 – Version 8.0.124

Frame: fixed issues with defining frames using custom images in upper right and lower right corners.

File/Preferences: removed option for web-based help. HTML Help which is built into Picture Window can be zoomed by holding down the Ctrl key and moving the mouse scroll wheel. Web-based help will no longer be updated although I will leave a copy of the current help files

in place for a while until everyone has a chance to update to a more recent version of Picture Window. The PDF version of the help file will remain available and will be updated going forward.

Export Transformation: if Save To is set to Clipboard, the Write File button becomes Copy File and clicking it copies the exported image to the clipboard.

When saving script or workspace script files, the order of the top-level branches is now recorded in the file. If this information is present when opening the saved script or workspace script, the original order of the top-level branches is now restored. With previous versions, the order of the top-level branches was not recorded or restored. This difference is cosmetic since the order of the top-level branches is arbitrary, but it can be confusing if the workspace comes back looking different from when you saved it.

29-Jul-2020 – Version 8.0.123

Warning: the following major change to the way mask tools work has been tested extensively, but due to the complexity of the changes there may still be some problems. I recommend saving your previous PWP 8.0.exe file should you need to revert to the previous version.

Mask: changed the way all the mask tools that have Apply buttons work so the effects are visible immediately when you change settings, but not finalized or passed to the transformation until you click the new Apply button in the upper part of the Mask dialog box (looks like a running man). This saves you from having to undo and re-apply mask operations repeatedly to fine tune the settings. Individual mask tool Apply buttons have been removed, and pending mask operations are confirmed when you switch tools. Pending operations are always performed when you close the mask dialog box. If there is a pending operation, the Mask Mode buttons can be used to switch modes before the operation is finalized. The Mask Mode buttons are grayed out for mask tools that ignore the mode. See the updated help file or Creating and Using Masks.pdf for details.

Full screen display: fixed minor issues with the way black and white images are converted to the monitor color space.

File Open: eliminated warning if default folder is not accessible.

Added keyboard shortcut Ctrl-W to execute the last Script/Recover Workspace... command.

When saving a file of a specific type (e.g. in File/Export), when asking for a filename, the correct extension is now proposed.

Color Management: added Print Profile List... button (same as in PWP 7).

9-Jul-2020 – Version 8.0.122

Posterize: added right-click menu on color controls to remove an individual color or to reset the remapping of an individual color. Also fixed a couple of minor interface issues.

Mask: the mouse scroll wheel now adjusts the blur radius, paint radius, flood fill threshold, pinhole radius or median radius, if the corresponding tool is selected. As usual, holding down the Alt key reverts the scroll wheel to its normal operation, namely zooming the main image area in or out.

4-Jul-2020 – Version 8.0.121

Test Patterns: added a new Color Spin test pattern to test if color management is in effect – see the help file for a description.

Selective Color Correction Transformation: fixed problems with some checkboxes not being restored when the transformation was edited.

Selective Color Transformation and Control: fixed problems with selecting control points not triggering an update when Show Affected Region or Save As Mask were checked.

Change Name dialog box now starts up giving focus to the name edit control and with the existing name highlighted.

Eliminated some redundant warnings if the default folder does not exist.

30-Jun-2020 – Version 8.0.120

Conformal Mapping: reworked Antialias setting to provide higher values and more uniform subsampling.

Selective Color Transformation and Control: left click on a new control point just selects it – left click on the current control point lets you drag it. This provides a way to select without accidentally dragging.

File/Preferences: added Bottom Center as an option for the initial dialog position.

Test Patterns: added a Gray Discrimination pattern to test how well adjacent gray levels can be distinguished against a black, white or gray background.

28-Jun-2020 – Version 8.0.119

Adjust Transformation and Selective Color Correction Control: added Show Affected Region checkbox, and fixed problem causing Show Affected Region and Save as Mask not to respond to changes in the Weight slider.

26-Jun-2020 – Version 8.0.118

Lines, Arrow and Text: fixed error message when running saved transformations.

26-Jun-2020 – Version 8.0.117

Compare: added option to pass through a copy of Image A, Image B or the Compare results on OK or Apply.

Changed warnings on closing images depended on as auxiliary inputs or masks by other transformations to distinguish between changing vs invalidating the affected inputs or masks.

File New and Size to Fit: fixed problem of settings not updating when reference image changed.

Changed "image" to "transformation" if various messages related to selecting and copying transformations.

Added a Gallery page to the web site, but it is not filled out yet.

Adjust: fixed problem with selective color correction sliders remaining visible after a Reset.

24-Jun-2020 – Version 8.0.116

Text transformation and Text Control: text strings are no longer automatically updated after the keyboard delay set in File/Preferences. There is now a check mark button just above the text entry field that you have to click to get the text to update. This means you no longer have to enter strings quickly and without pausing, but there is an extra step to get changes to be processed.

Lines/Arrows/Text Tool: fixed problem with semi-transparent line and curve artifacts where the line or curve segments join.

Change Profile: added error message if color management is disabled or target profile is an input (scnr) profile.

Size To Fit Transformation: Added Scale To Fit – No Border option. This resizes the cropped area of the input image, preserving its proportions, so the output image fits inside the reference rectangle. This is similar to Scale To Fit except the output image is not padded out to the full reference rectangle with the border color.

File/Export and Export transformation: Added bounding box option to resize the image to fit a rectangle of given width and height.

21-Jun-2020 – Version 8.0.115

Lines/Arrows/Text Tool: fixed problem with drop shadow dialog box being left open when transformation is closed, fixed problem with current line's text box disappearing when clicking OK or Cancel, fixed problem with control points being allowed to be placed outside the input image, fixed problem with drop shadows causing misaligned and truncated text.

Text: fixed misalignment and truncated text problems with drop shadows

20-Jun-2020 – Version 8.0.114

Fixed truncated controls in File Save options dialog boxes.

As long as the main window is on the primary monitor, if the window is maximized when Picture Window is shut down, it now opens maximized at the start of the next session.

Fixed problems with Macro and Unicode buttons in text controls.

Composite: when there are exactly 2 alignment points, an extra tool bar is now displayed to let you fine tune the rotation angle in increments of $\frac{1}{4}$ degree. When the Shift key is down, the increment is reduced to $\frac{1}{16}$ degree.

18-Jun-2020 – Version 8.0.113

Updated Icms (color management system) to version 2.11.

Updated ExifTool to version 12.00.

Added warning message when closing one or more images if closing them would invalidate any auxiliary inputs or masks in other transformations.

Lines/Arrows/Text Tool: Control points for the current line are now displayed as larger, filled circles so you can tell which line is selected. Closing the text control now removes the text box.

17-Jun-2020 – Version 8.0.112

Reduced blinking when graying or un-graying tool bar icons.

Masks: fixed problem causing crash when selecting an existing mask from an Amount mask menu when the referenced transformation was bypassed.

Lines/Arrows/Text Tool: Changed the way control points are edited. Clicking near an existing control point makes the corresponding line and control point current. Dragging moves the control point. Clicking away from any existing control points adds a new control point to the current line, if any. Ctrl-Clicking near a control point deletes it. Shift-Clicking starts a new line using the current settings. See the help file or Transformations.pdf for more details.

Clone: when attempting to clone from an image that has subsequently been closed, the stroke is now ignored.

15-Jun-2020 – Version 8.0.111

File Preferences: increased maximum text delay to 5 sec.

Lines/Arrows/Text Tool: fixed problem with the text control not updating when switching among lines. Fixed problem with crash in some cases when text control was closed via its close icon.

Added a new File Save (and File Export) option to allow including a workspace script (with image names or with image copies) when saving or exporting files. You can set this as a default option in File Preferences or specifying when asked at the time the file is being written. This option is intended to deal with the situation where your workspace may include several versions of the same image or possibly multiple images and you want to save one of them but also want to retain the option to regenerate the others at a later time. For example, you may have an edited image cropped several different ways for different uses or resized to several different resolutions, depending on whether you intent to print it, view it as screen wallpaper, post it on the web or email it. If you include a regular script, just the transformations needed to regenerate the current image are saved and the transformations needed to regenerate the other versions of the image are not saved.

13-Jun-2020 – Version 8.0.110

File Open: fixed problem with changing current image not clearing out the transparency mask from the previously current image.

File Open: added support for reading RGB TIFF files with an embedded alpha channel (similar to transparent PNG files). The transparency mask becomes the mask for the File Open. Currently no support for writing transparent TIFF files. Unfortunately, the Microsoft TIFF codec in some cases does not recognize black and white transparent TIFF files and in other cases misrecognizes them as RGB image, so these files cannot be read reliably.

12-Jun-2020 – Version 8.0.109

Export: added zoom to fit after changing destination and fixed problem with overwriting existing files not working correctly.

File Save: fixed problem of incorrect dpi setting being saved in JPEG files in certain cases.

11-Jun-2020 – Version 8.0.108

Added support for reading transparent PNG files. The alpha channel becomes a mask for the File Open in the image browser and can be selected as an initial mask image in the Amount menu.

9-Jun-2020 – Version 8.0.107

Implemented Tab and Shift-Tab keys in most dialog boxes to move between multiple edit controls.

Resize: fixed problems causing crash if too small a dimension in pixels was entered.

5-Jun-2020 – Version 8.0.106

Color Line and crv files from PWP 7 can now be loaded. The old formats were the same but the extension changed.

Color Curves (cc) files from PWP 7 work OK already.

Colorcorrect files from PWP 7 and now be imported via the Selective Color Correction settings menu.

4-Jun-2020 – Version 8.0.105

Selective Color Correction Transformation and Control: removed Radius Slider and added Weight Sliders for each control point, similar to Hue Saturation Control. Existing scripts containing Selective Correction transformations will work the same as before. New scripts will be saved without a radius setting and with individual weights, so the results may be slightly different if you open a script and then save a new version.

Updated Icms (color management system) to version 2.10.

Updated ExifTool to version 11.99.

Added support for Nik Plugins version 3 which adds a new Perspective Efex filter.

1-Jun-2020 – Version 8.0.104

Speck Removal Tool: speeded up Patch Match by using multiple threads.

Export: added status display during file save operation.

Selective Color Correction: fixed problem causing slight color shift when displaying modified color wheel and potential overflow problem when making large brightness changes to 48-bit color images.

Added new Hue Saturation Control (see updated help and pdf files) for use in Monochrome and Mask (see below).

Monochrome: added a new conversion method: Hue Saturation. This lets you lighten or darken the result by placing control points on the color wheel.

Mask: added a new mask tool: Hue Saturation. This uses the same new Hue Saturation control as Monochrome to let you create masks based on hue and saturation by placing control points on the color wheel.

Mask: fixed problems with dragging the Mask dialog box to a second monitor.

21-May-2020 – Version 8.0.103

Speck Removal Tool: undid previous changes and fixed some problems with the original patch match algorithm.

File Export: when you click OK, if you are saving to the output image, an Export transformation remains behind so as to retain the output image. Also, fixed problems with exporting and Profile set to None.

19-May-2020 – Version 8.0.102

File Save and Export: now embeds up to date thumbnails in TIFF and JPEG image files using ExifTool (unless Metadata in Default File Save Options is set to None).

File/Export command and Export transformation: reworked to allow saving to clipboard or as output image. See updated help file or Transformations.pdf for details.

Speck Removal Tool: increased the size of the area Patch Match searches for a replacement patch.

17-May-2020 – Version 8.0.101

Crop: fixed problems adjusting cropping rectangle when input image changes dimensions.

Warp: improved accuracy at which settings are saved.

Added tests for missing folders to new code to make folders accessible from the File Open and Save dialog boxes.

Added tests for missing default folder where it is referenced. If the default folder cannot be accessed, the Windows My Pictures folder is used instead. If that cannot be found, C:\ is used. A warning is issued if the default folder is missing or inaccessible.

15-May-2020 – Version 8.0.100

Resize: fixed some minor dialog refresh problems when changing certain settings.

The recently opened/saved file list at the bottom of the File menu now includes workspace scripts (unless they were saved or loaded automatically).

When opening or saving image files, scripts, or settings files, certain folders are now accessible from the Windows File Open or Save dialog boxes, including the default folder (as set in File/Preferences), the last folder a file was opened from or saved to, and the standard file location inside My Documents\Picture Window Pro. The names of these folders show up in the navigation pane that runs down the left side of the dialog box, under the entry Picture Window Pro.

10-May-2020 – Version 8.0.99

Optimized code to prepare images for display in the main image area to use multiple cores.

Scratch Removal: fixed problems with an extra control point being inserted when creating first control point of a new scratch.

File Open: fixed problems caused when saving scripts with image copies – relative image file pathnames are now converted to fully qualified pathnames when scripts are loaded.

Fixed problems zooming in with scroll wheel when mask overlay is being displayed.

8-May-2020 – Version 8.0.98

Remove Purple Fringe: Improved algorithm to provide more accurate restoration of colors where the purple fringe is replaced.

Card to Folder: fixed problem creating subfolders in folders that do not already exist.

File/Set Default Folder: fixed problems with canceling from folder selection dialog box.

7-May-2020 – Version 8.0.97

Compare: Alt-click and drag now scrolls the preview when you release the mouse button.

Fixed problems with mouse wheel zooming of main image area for side-by-side display.

Fixed incorrect circular reference warning in some cases when copying transformations.

5-May-2020 – Version 8.0.96

Compare: fixed problem of preview scroll bars disappearing when dragging the dialog box to another monitor.

When zooming in or out using the mouse wheel in the main image area, the cursor now remains on the same part of the image.

2-May-2020 – Version 8.0.95

Fixed problem causing high CPU usage when PWP was minimized.

Image Browser: added bypass/un-bypass buttons to the Copy/Close tool bar at the top of the image browser. These buttons bypass or un-bypass all currently selected transformations, to the extent possible and then recalculate whatever images are affected.

30-Apr-2020 – Version 8.0.94

Mask: fixed problems with referencing a mask from a bypassed transformation as an initial mask.

Clone: fixed several problems related to cloning from one image to another.

28-Apr-2020 – Version 8.0.93

Layout: fixed problem with loading some saved layouts causing panels to be shifted horizontally and change width.

Help file and tutorial: added diagram to description of recommended workflow.

26-Apr-2020 – Version 8.0.92

Added two new buttons to the main tool bar – one for File/Card to Folder and one for Edit/Image Info. New bitmaps require a full install.

Added section to the tutorial document on using scripts.

23-Apr-2020 – Version 8.0.91

Added a couple of missing bitmaps.

23-Apr-2020 – Version 8.0.90

Crop: fixed problem of size readouts not updating when changing proportions.

Composite: added an extra tool bar at the top of the dialog box to let you switch between input and overlay image and to show which one is selected.

Match Reference: added an extra tool bar at the top of the dialog box to let you switch between input and reference image and to show which one is selected.

Several new bitmaps are used by Composite and Match Reference so you will need to do a full install.

21-Apr-2020 – Version 8.0.89

Card to Folder: changed year-mon-date and year-mon formats to be numeric and fixed problem with files being skipped in some cases even when they did not already exist. Added option to store images by year/month/day subfolders.

Updated ExifTool to 11.94

Fixed problem with full screen display (Ctrl-F) displaying a black screen in some unusual cases.

Added status display while loading scripts or workspace scripts.

Wave: fixed problem of output image not being assigned a profile.

Advanced Sharpen, Denoise, Gaussian Blur, High Pass, Linear Blur, Precise Gaussian Blur, Unsharp Mask and Watercolor: Reset now forces an update of the output image.

19-Apr-2020 – Version 8.0.88

Updated help and Creating and Using Masks.pdf with clarifications in the Tips sections.

Card to Folder: added date format options to Settings menu.

Orton Effect: fixed problem of lightening curve not being applied after reading settings files.

15-Apr-2020 – Version 8.0.87

Revised the cross cursor again.

Added size warnings when moving images up or down by one on the current branch.

Card to Folder: added new **If already exists** options.

Crop: fixed problems of size of crop box changing slightly after centering horizontally or vertically.

13-Apr-2020 – Version 8.0.86

Revised the cross cursor to be more visible.

Some user interface changes to Card to Folder and added Subfolders by date and Subfolders by extension checkboxes.

12-Apr-2020 – Version 8.0.85

Lines, Arrows & Text: fixed problem with Ctrl-Click when displaying only input image.

Added new File/Card to Folder command to copy image files from a camera card to a folder. See updated help file for details.

Updated routine that lets you select folders to use current technology – old version did not work reliably.

10-Apr-2020 – Version 8.0.84

Fixed some minor issues with the clipped highlight and shadow bitmaps.

Several tool transformations: fixed problem causing crash when editing a transformation, canceling, and then canceling out of the Abandon Changes dialog box.

Lines, Arrows & Text: fixed problem with clicking OK with only input image displayed not updating the output image.

9-Apr-2020 – Version 8.0.83

Added two missing bitmaps to installer.

9-Apr-2020 – Version 8.0.82

Fixed problem causing image display not to be color managed when show highlight or shadow clipping was enabled.

File Preferences: removed second clipping color. Added a new tool bar on the main menu to select which color space is used to detect clipping: HSV value or HSL lightness. In HSV, it indicates if any highlight channel is clipped (fully saturated color). In HSL, it indicates if all channels are clipped (white). For either HSV or HSL, shadow clipping indicates black. The new tool bar is only displayed if the highlight clipping button is depressed. You will need to do a full install to get two new bitmaps.

8-Apr-2020 – Version 8.0.81

Masks: enabled side-by-side display and synchronized scrolling tool bar.

Color Management: fixed several problems with monitor profile settings, including if Set Monitor Profile From System Settings was selected and there was no system monitor profile.

Fixed a problem with certain tools when loading settings files with no strokes.

6-Apr-2020 – Version 8.0.80

Brightness Curve: fixed problems with Shift- or Ctrl-click on Amount button when there is a mask.

Layout: fixed a problem with canceling the Abandon Changes dialog box and then clicking Cancel.

Image menus: fixed a problem with clicking over a blank part of the image browser.

5-Apr-2020 – Version 8.0.79

Layout: fixed problem with canceling the Abandon Changes dialog box and then clicking OK.

Brightness Curve: added the option, when the amount control is set to a mask, to specify two curves – one for the masked area and one for the unmasked area. This lets you, for example, lighten one part of an image and darken another. See the help file or Transformations.pdf for details and examples – full install required for the two new bitmaps.

Suppressed scrolling of image browser when it contains enough thumbnails to require scroll bars and a fully visible thumbnail is clicked.

Mask: fixed Mask Paint tool recording cursor motion even when not dragging.

4-Apr-2020 – Version 8.0.78

Fixed problems with reading old scripts that included File New commands, and possibly some other commands.

Fixed crash in Lines, Arrows & Text tool when canceling a transformation after creating one or more text boxes in some cases.

Suppressed warning when saving files without metadata.

File Open: fixed problems running a batch job with no files selected.

Updated help and tutorial keyboard shortcuts to include F1 and F2.

2-Apr-2020 – Version 8.0.77

When reading image files, if $\text{dpi} \leq 0.0$, dpi is reset automatically to 72.0 and a warning is issued.

Fixed problems with Lines, Arrows & Text tool not starting up correctly when editing transformation that included a text box, and not preserving line color.

31 Mar-2020 – Version 8.0.76

Image Menus: clicking outside the menu now closes the menu (unless you click on a thumbnail in the image browser).

Lines, Arrows & Text, Fill, Redeye Removal, Speck Removal, Scratch Removal Tools: Checked that current control settings are saved in settings files and restored when editing the transformation. Default settings files now omit any applications of the tools when saved or loaded.

Amount controls: fixed problems with incorrect Amount menu image lists in some cases.

Fixed Internal Error message when adjusting separator bar position after loading a script that included splitters.

29 Mar-2020 – Version 8.0.75

File Open: fixed problem causing black output image in certain obscure cases.

Precise Gaussian Blur: removed the change from the previous version, and instead added a checkbox to use the Amount mask as the Blur mask.

Amount Controls: fixed problem with a list of mask images being displayed in the Amount menu when the Amount control is not reset.

28 Mar-2020 – Version 8.0.74

Warp: fixed problem causing output image size to be incorrect in some cases after loading a settings file.

Added vcruntime140_1.dll to the installer.

Precise Gaussian Blur: If the Mask amount control has a mask image but the Amount control has no mask image, the Mask is applied as the Amount mask. This lets you antialias the edges of the blur without having to define two copies of the same mask image.

27 Mar-2020 – Version 8.0.73

Moved Bitmaps folder from the folder where PWP is installed to the PWP folder in My Documents to fix problem with certain button icons not updating unless PWP was run with administrative privileges.

Migrated to Visual Studio 2019 and CUDA 10.2 from Visual Studio 2017 and CUDA 10.1.

Everything should work the same.

File/Preferences: Added setting to select Local or Web help file. Web-based help files are viewed via your default web browser and can therefore be zoomed larger or smaller. Local help files are faster and work whether or not you have internet access.

Masks: fixed problem with Re-open Mask Dialog Box missing from the Amount menu in some cases involving multiple amount masks.

Added a copy of the PWP Help file as a PDF file to the Downloads page.

23 Mar-2020 – Version 8.0.72

Fixed problems with black image display in some cases.

23 Mar-2020 – Version 8.0.71

Fixed internal problem locating bitmaps folder in some cases.

Fixed problem causing crash when displaying a mask overlay with highlight or shadow clipping enabled.

Fixed problem of existing masks not showing up in the Amount control mask menu in some cases.

23 Mar-2020 – Version 8.0.70

Show Clipped Highlight and Shadow Buttons now reflect both clipping colors. Highlight and Shadow clipping is now based on the underlying image and not on the version transformed into the monitor color space for viewing.

Lines, Arrows, Text: fixed problem with text boxes sometimes disappearing after closing and then re-opening the transformation dialog box or when reading the transformation from a script file.

Help/Create Portable Install: You can now create a self-contained portable version of PWP that can run, without being installed by the Windows installer or installing any files on the host computer, from a flash drive or other folder. In the portable version, all settings are stored in a Settings subfolder instead of their normal locations.

To create a portable install, use the Help/Create Portable Install... command. It first asks you to select a folder where the portable install will be created. For a flash drive install, select the root directory of the flash drive. Next, a folder named the same as the current Picture Window version is created and the necessary files are copied to the new folder. Finally, a link to the Picture Window executable is created. To use the portable version, plug in the flash drive and double click the link.

Fixed crash when loading a script with a file open for a non-existent file and responding with Cancel to the request to supply a replacement file.

21 Mar-2020 – Version 8.0.69

Color Picker: added a new menu item to the end of the settings menu to save the current color space (RGB/HSV/HSL) and units (percent/decimal/hex) as the readout defaults used when a new color picker starts up. These defaults are saved between sessions.

Mask: fixed problem with Mask Paint Tool brush settings not being restored correctly from a default mask settings file.

20 Mar-2020 – Version 8.0.68

Lines, Arrows, Text: fixed problems with Reset and clicking to start a new line with Text Box button depressed.

Mask: settings files now include the states of all the various mask tools (for example, brush settings, blur radius, gradient color line, etc.). Default mask settings files include this information but omit any actual mask operations. Default mask settings, if any, are loaded on Reset or when starting a new mask.

19 Mar-2020 – Version 8.0.67

Added missing file Text.bmp to installer script.

19 Mar-2020 – Version 8.0.66

Line and Arrow tool: renamed to Lines, Arrows, Text. Added Text button which pops up a dialog box to let you enter text to be placed at the starting point of the current line. See the updated help file or Transformations.pdf for details.

Create Profile: fixed problems with running the transformations in locales which use commas instead of periods as decimal points.

Color Picker: Ctrl-click and Ctrl-Shift-click now bump brightness slider as for other sliders.

ExifTool: updated to version 11.91

Added an autosave workspace after a successful File Open of an image file.

Mask: disabled loading of default settings file which was not working properly -- will provide a more permanent fix later.

14 Mar-2020 – Version 8.0.65

Amount controls: in the popup menu, changed Edit... to Re-open Mask Dialog Box. This menu item is only displayed if the mask dialog box is not already open.

Text transformation: new settings – Text Margins, Outline Color and Outline Width. If Text Margins is set to -1, the background rectangle can be dragged to any arbitrary location, as before. Otherwise the background rectangle is made to fit around the text box with specified margins in pixels, and it cannot be repositioned manually. The Outline Color and Width control the color and width of the outside edge of the background rectangle.

Create Profile: fixed problem of missing side-by-side button. Also added error message if color management is disabled and slightly increased the error threshold for detecting non-uniform patches.

Sliders: clicking on a slider with the Ctrl key depressed moves the slider 4 pixels right or left, depending on whether you click to the right or to the left of the current slider position. If the Shift key is also depressed, the slider moves by 1 pixel instead.

10 Mar-2020 – Version 8.0.64

Copying a File Open or running a script saved without image names now updates the caption of the thumbnail with the name of the new file once it has been opened.

Color Balance: fixed problems with setting color balance by dragging curve control points.

Added Sharpen Test and Gamma Test to the list of test patterns you can generate. See the updated help file for details.

9 Mar-2020 – Version 8.0.63

Print: fixed problem with not recognizing printer curves with the extension “.cc”.

Added Edit/Clone Branch command (also added to right-click on thumbnail menu). This inserts a splitter above the current image, unless there already is one, and then copies the current image and all the ones below it in the image tree to the new branch.

7 Mar-2020 – Version 8.0.62

Composite: fixed problem with Overlay Amount being reset to 100% when editing the transformation or when running it from a script, if Overlay Image is set to a solid color.

6 Mar-2020 – Version 8.0.61

File New: fixed problem with Reference Image not working for 16-bit images.

5 Mar-2020 – Version 8.0.60

Fixed problem with Replace Channel transformation if Channel Image was set to a Bypass transformation.

Distort Transformation: added a new method: Inverse Multiquadratic.

File New: added a Reference Image control. If an image is selected, its type, width, height and dpi are copied to the other controls. You can still change one or more of the settings manually after selecting the reference image.

4 Mar-2020 – Version 8.0.59

Added two new transformations: Transformation/Color/Replace Channel and Transformation/Geometry/Distort. See the updated help file or Transformations.pdf for details.

Fixed problem with digital signing.

Clarified the help file and tutorial regarding thumbnails, transformations and images, especially as they relate to closing and copying transformations within the image browser.

2 Mar-2020 – Version 8.0.58

Fixed some residual problems with file extensions when saving image files.

1 Mar-2020 – Version 8.0.57

For clarity, the default caption for File Open transformations now starts with “File Open - ”, followed by the filename, instead of just the filename. Existing scripts and workspace scripts will still use the old naming convention since the caption is saved in the script file.

Fixed problem with saving scripts with image copies.

Fixed problems with saving image file whose filenames contain periods.

I am having problems – hopefully temporary – with digital signing of PWP so I have removed it for now.

28-Feb-2020 – Version 8.0.56

Added two new clipping colors to File/Preferences so you can distinguish between one or two RGB channels clipped and all three channels clipped (where clipping is defined by the threshold values). If you set both colors the same, it continues to work as before.

Line and Arrow tool: when inserting a new point on a curved line, the initial slope is now set more intelligently rather than always setting it to zero.

Grid buttons on the main tool bar now affect all images, not just the current image. This also means that during transformations, the grid is displayed on both the input and output images.

Line and Arrow and Speck Removal tools: fixed crash with radius set to 0.0.

26-Feb-2020 – Version 8.0.55

Fixed some problems with closing images.

Line and Arrow, Fill, Levels and Color, Scratch Removal, Speck Removal tools: fixed crash when editing a mask immediately after editing the transformation.

25-Feb-2020 – Version 8.0.54

Clone, Paint, Smudge, Levels & Color tools: fixed problem of recalc not propagating on OK after editing the transformation and applying new strokes.

24-Feb-2020 – Version 8.0.53

Implemented a different fix for the problem of closing certain transformation dialog boxes not preserving the zoom status of the input image.

Fixed problem of various transformations causing downstream images to zoom incorrectly after clicking OK.

23-Feb-2020 – Version 8.0.52

Added optimizations to all transformations to prevent most unnecessary recalculations of images that depend on the transformation. For example, an Apply followed by an OK no longer triggers a recalc.

Fixed problem in Drop Shadow transformation.

Fixed Exiftool not installed error.

Removed inactive Clone Side Branch command.

Removed fix from 20-Feb regarding clicking on thumbnails not zooming to fit.

Renamed the Edit/Add Branch command to Edit/Add Branch to Splitter. This command now works if the current image is either a splitter or a side-branch. If it is a side branch, it adds a new side branch to the splitter immediately above the side branch.

Fixed problem with closing transformation dialog boxes with active masks not resetting the display from split screen.

21-Feb-2020 – Version 8.0.51

Fixed serious bug causing file save with scripts not to work and probably other problems as well.

Added button to Line and Arrow tool to enable drawing exactly horizontal, vertical or 45 degree lines.

Added missing bitmap files to installer script (for colorblind color scheme in File Preferences).

20-Feb-2020 – Version 8.0.50

Fixed problems with clicking on a thumbnail to select a new image not always zooming it to fit.

Fixed problem with File Close from main menu not working.

File Open: fixed problem with crashing after opening multiple files, making one of the last ones current, and then opening a new, smaller set of files.

Recover Workspace Script command now remembers which workspace you chose the last time.

High Contrast: fixed problem that could cause very small variations in output image when reprocessing the same image with the same settings.

File/Preferences: added an option to change the dependency coloring scheme in the image browser from red/green to blue/orange to accommodate certain types of color blindness. If you select this feature you will need a couple of new bitmaps and a full install.

Fixed problem with crashing when closing an image that was an auxiliary input to a transformation that also had an associated mask. This situation could arise with Composite, Layout, Repeat, Stack Images, Watermark and Wave.

Fixed some problems with file extension handling when saving settings files.

16-Feb-2020 – Version 8.0.49

Added status display during File Open and File Save operations.

Added check before copying selected images to prevent creating circular references. Added a similar check to Shift-Up and Shift-Down which move an image up or down in the current branch.

Selective Color Correction: fixed problems with executing this command from a script.

Removed Auto/Manual recalc buttons from the main tool bar.

15-Feb-2020 – Version 8.0.48

Added Script/Recover Workspace command – this lets you load the workspace file from the previous session, the last saved workspace, or one of the autosaved workspace files.

Script/Open Workspace Script now goes directly to the Windows File Open dialog box.

15-Feb-2020 – Version 8.0.47

Select all downstream or upstream images now deselects if the current image is already selected.

Modified Change Name dialog box (used to change the caption of a thumbnail) to have an OK and Cancel button, with OK the default pushbutton so it is selected on Enter.

Image Browser: removed Select None button from Select tool bar. If no images are selected, Select All selects everything – otherwise it deselects everything.

Fixed some problems with running scripts produced by older versions of PWP.

Mask Paint Tool: Accumulate and Don't Accumulate buttons were reversed.

14-Feb-2020 – Version 8.0.46

New tool bars added to image browser to facilitate selection of multiple images and then closing or copying the selected images. The dependency highlighting button in the image browser was removed – dependency highlighting is permanently turned on. The button was replaced with a down arrow to show or hide the two new tool bars.

Removed several now redundant commands from the Edit menu and from the context menu (right click on a thumbnail) related to rearranging the image tree. Removed Set as Destination, Copy to Destination, Move to Destination and Reset Destination, as well as some commands to clone branches.

Changed the meaning of Shift-, Ctrl-, and Ctrl Shift-clicking on thumbnails. Now these are used to select multiple images.

Closing images no longer requires also closing all images that depend of them. It now partially resets any transformations that used the closed image as an auxiliary input or mask.

The workspace is now autosaved (if autosave is turned on) before a close or copy to allow recovery from accidental operations.

See the updated help file (Image Browser section) and tutorial PDF file for details.

New bitmaps will require a full install.

13-Feb-2020 – Version 8.0.45

Zooming the main image area via the mouse wheel zooms the image so the part under the cursor is centered, as much as possible. Now it also moves the cursor to the center of the image being scrolled so that subsequent zooming stays centered on the same part of the image.

Compare: fixed problem with background not being erased while zooming out, in certain cases.

Image browser display: fixed problem causing unnecessarily wide blank space between branches in some cases.

9-Feb-2020 – Version 8.0.44

Fixed problem with incorrect cursor sometimes being displayed when moving the cursor over the main image area for certain transformations.

Fixed problems with Esc and Return emulating Cancel and OK in transformation dialog boxes. There is still a problem with transformations (Text and, in some cases, Layout) when a multi-line edit control has the focus. You can still use Esc and Enter in these cases as long as you click on the main image area first.

Precise Gaussian Blur: fixed problems, especially with radius > 32.

Workspace Scripts: saving Autosave and Previous workspace scripts no longer records them as the last workspace script saved.

Editing a transformation and clicking OK or Apply now changes the S to an M in the image browser, indicating the image is potentially changed since the last time it was saved.

30-Jan-2020 – Version 8.0.43

Fixed problem causing a crash after closing a transformation dialog box while a mask dialog box was open.

Fixed problem that could cause a crash when closing an image if it was the only one.

Removed Del keyboard shortcut (conflicted with edit controls).

Removed Ctrl-A and Ctrl-Q keyboard shortcuts. Enter and Esc now work instead. (Ctrl-A conflicted with edit controls).

Fixed problem of image bit depth display being invisible or hard to read for black and white images if the border color was set to white or a very light color.

Crop: fixed problem with margin readouts not being updated after clicking one of the buttons in the tool bar at the top right of the dialog box.

If Autosave is enabled (recommended), the workspace is not only saved on OK or Apply, but is also saved just before closing an image or just before clearing the workspace. This provides a recovery method if you close images by accident. Up to four recent autosave files are now kept alongside Autosave.workspace to provide extra insurance. The files are named Autosave1.workspace ... Autosave4.workspace (from most recent to least recent).

28-Jan-2020 – Version 8.0.42

Levels and Color Transformation: removed warning message when adjusting dynamic range.

Fixed problem possibly causing occasional random crashes on mouse clicks.

Autosave now defaults to On for new users.

New keyboard shortcut: Del key closes the current image (with confirmation).

22-Jan-2020 – Version 8.0.41

Closing a window that takes control of the image area (e.g. a color picker, mask dialog box, readout tool) now restores control to the current transformation dialog box, if any.

Updated the web site to use an SSL certificate. This means that browser access will be secure as long as you link to it using https://... Instead of http://... . Please update any bookmarks or saved links accordingly, although insecure access will continue to work if you don't. Otherwise you should not see any difference.

21-Jan-2020 – Version 8.0.40

Speck Removal: added a new speck removal method -- Shrink. See help file or Transformations.pdf for details.

Size to Fit: fixed problem of input image overlay being displayed over auxiliary input as well.

Layout: fixed problem with cropping rectangle overlay in certain cases.

Text: fixed problem of output image not being recalculated if there is no text string entered and the background transparency is less than 100%. Fixed problem of central cross not being displayed if the center of the background rectangle and the text rectangle are coincident.

19-Jan-2020 – Version 8.0.39

File/Preferences: fixed problem with initial dialog position not being saved.

18-Jan-2020 – Version 8.0.38

Resize: fixed problem with inputs in metric units.

17-Jan-2020 – Version 8.0.37

Orton Effect: fixed problem with 16-bit black and white and 48-bit color images.

16-Jan-2020 – Version 8.0.36

Orton Effect: added color space and curve control to let you pre-lighten the input image before filtering it with itself. This gives more control than the Exposure slider with lightens after filtering.

Masks: fixed problem with Amount thumbnail not being displayed.

Multi Color Balance: made changes to fix internal error on some systems.

14-Jan-2020 – Version 8.0.35

Speck Removal: added a third speck removal method – Four Way Interpolation. This is the method used previously in PWP 7.

Fixed problems causing the cursor to blink in the main image area on some computers.

Blend: added formulas for each Operation to the help file.

13-Jan-2020 – Version 8.0.34

Save Workspace Script command now grayed when workspace is empty.

Speck Removal: fixed some problems with softness setting.

Ctrl-Click on an Amount thumbnail now temporarily sets the amount to 100% (unless it is zero-centered in which case it sets it to 50%). This is like Shift-Click which temporarily sets the amount to 0% (unless it is zero-centered in which case it sets it to 50%).

11-Jan-2020 – Version 8.0.33

Undid a minor change made in 8.0.32 to the way ExifTool handles orientation tags.

Added a setting to File/Preferences to disable tablet usage.

Keyboard shortcuts (Ctrl-A and Ctrl-Q) simulate clicking OK and Cancel in the currently open transformation dialog box, if any.

Speck Removal: added a softness slider and fixed problem causing speck removal to have a harder edge than was intended.

Scratch Removal: added a softness slider.

Added two new File/Preferences settings to control confirmation messages when opening workspace scripts or scripts.

10-Jan-2020 – Version 8.0.32

Fixed problem with Levels and Color tool when mask transparency set to Mask.

Resize: Added Pixel Bounding Rectangle, Physical Bounding Rectangle, Pixel Percentage and Physical Percentage options. Reworked the transformation extensively to fix a range of problems with applying settings to new images.

Changed the way version numbers are added to filenames when saving image files to fix certain special cases.

Updated to ExifTool 11.83.

7-Jan-2020 – Version 8.0.31

Fixed problem of multiple batch status display not showing thumbnail of current image.

Fixed problems with Levels and Color tool when mask transparency set to Mask Only and also when the mask color was set to white.

6-Jan-2020 – Version 8.0.30

Speck Removal Tool: updated some outdated text in help file.

Fixed bug in multiple batch processing causing files to be skipped randomly.

5-Jan-2020 – Version 8.0.29

File Open: fix some recalc errors in multiple batch processing and a problem with saved scripts.

Compare: changed **Compare To** to **Image B** and updated information in Transformations.pdf and help file. Fixed problem with A over B mode having the images switched.

4-Jan-2020 – Version 8.0.28

Levels and Color: now starts up set to Reset. Selecting Reset Dynamic Range toggles this setting. Scripts created by versions 8.0.25 or earlier default to Not Reset for compatibility.

Drop Shadow Control – fixed problem causing drop shadow color control to be invisible.

File Open now records, in its command line, which files in the file list are selected, and restores the selection when the dialog box is opened. It also now displays the total number of files in the file list and the number of selected files.

File Open: added a new tool bar to select single/multiple batch. This allows batch processing files in groups instead of one at a time, for example to process lists of left/right stereo image pairs. For more information see the updated help (File Open and Batch Processing topics) or Batch Processing.pdf. Removed Single Step mode as it was not working correctly and could not easily be fixed. Removed the ability to hide the Batch Status dialog box.

You will need to do a full install to get two new bitmaps used in File Open.

31-Dec-2019 – Version 8.0.27

Levels and Color: Fixed problem with Reset Dynamic Range always being applied to new images.

Note: for existing scripts created with 8.0.25 or earlier, the Reset Dynamic Range setting is defaulted. In 8.0.26 it defaulted to Reset – in 8.0.27 it now defaults to Not Reset which is more consistent. To get this feature to work with old scripts, they must be re-saved so the new setting is added to the saved command line.

When saving scripts or workspace scripts with image copies containing a File Open with more than one file in its file list, a warning is now issued that only the current file is saved. In some future version, I will explore copying all the other files in the list.

When saving scripts or workspace scripts with image copies: if a file that would be saved has the same filename as a file already saved to the script folder, to avoid duplicates, a file number is now added to the end of the filename (e.g. **name (1)**, **name (2)**, etc.). Previously the duplicate file was renamed **Untitled n** where n was the image number. Fixed problem with scripts being saved with double extension.

Changed the way the code signing digital certificate works – hopefully will improve the experience when installing.

30-Dec-2019 – Version 8.0.26

File Open: current image in file list is now retained when dialog box is closed and then re-opened. Upon re-opening, the list is scrolled to guarantee the current file is visible.

Levels and Color: Reset Dynamic Range is now checked in the Settings menu when you select it. It gets unchecked if you modify the dynamic range in any way. When a new input image is presented to Levels and Color, if Reset Dynamic Range is in effect, no change is made to its dynamic range (its black and white points are recomputed and the black and white markers are aligned with the tic marks on the dynamic range slider). If Reset Dynamic Range is not in effect, the dynamic range of the input image is stretched from its current range to whatever range is specified by the dynamic range slider. This change should make Levels and Color more useful in scripts.

File Save: if the original file is missing and you ask to save metadata, you now get a warning and have the option to cancel or save without metadata.

Readout and Histogram Tools: settings are now retained between sessions.

Changing the display tool bar in transformations (input/output/side-by-side) now always updates the image browser thumbnail.

File Export: fixed some problems with the Resample checkbox not being grayed when it should have been.

Color Balance and Multi Color Balance: Added items to Settings menu to control auto-white (and auto-black for Multi) thresholds. For overexposed images, a higher threshold may work better overall, although it can result in tinting of clipped highlights or shadows.

29-Dec-2019 – Version 8.0.25

Export: added the option to save the exported file to the original folder or to a custom folder. Be careful with this option as it is possible to overwrite your original files by accident.

Autorange: changes in the dynamic range slider are now reflected in the curve. Fixed problem causing crash when recalculating Autorange transformation in some cases.

Brightness Curve: added Reset Advanced Mode Settings to Settings menu. Fixed some problems with restoring the Antialias setting from the command line.

Fixed problem with extracting certain Unicode profile names from v4 ICC profiles.

Color Balance: fixed problem with auto settings not being applied correctly when the transformation was executed.

28-Dec-2019 – Version 8.0.24

Compare: fixed problems with computation of final image in some cases when No Image was selected.

Obtained a digital certificate for Digital Light a & Color, so future installs should no longer generate warnings from Microsoft about installing software from an unknown developer.

Autorange, Equalize, 21-Step Gray Calibration: default curve options are now overridden to always show curve only.

Resize: Added options to resize based on the shorter or longer dimension of image. See updated help file or Transformations.pdf for details.

Fixed a problem of certain popup menus going off-screen if you have multiple monitors.

File Open: fixed problems with Shift-Click not selecting multiple images once the file list has been scrolled.

Batch Status window: the pathname of the current file is now abbreviated to show only its beginning and end, if it is more than 80 characters long.

When a batch job is completed, the last processed image now remains current instead of returning to the first image.

Edit menu: Changed the name of the Add Side Branch command to Insert Splitter After to reduce confusion. There is now a separate Add Branch command to add a branch to a splitter.

Fixed problem that could cause a crash when closing the next to last branch of a splitter (which also causes the splitter to be closed).

The Copy transformation now sets its original pathname, if any, from its input image.

When saving scripts without filenames and the script is later run, when asking for a pathname, the initial folder is now set to your default folder if the original file was opened with File/Open from Default. This only applies to scripts (and workspace scripts) saved with the latest version of PWP. Scripts created with older versions always start in the last File/Open folder, although if you like to live dangerously, you can edit the script files manually by changing **from_default 0** to **from_default 1**.

26-Dec-2019 – Version 8.0.23

Fill Tool: fixed problem of fill points still displaying cross even after being deselected.

Fill, Speck Removal Tools: now ignore click or drag outside input image.

Scratch Removal Tool: when drawing the overlay on the input image, scratches of zero length are now displayed as a single control point. Now, if you shift click on the input image, you get a visible point – the next time you shift-click the scratch is extended to a straight line.

Compare: fixed problems with crash if No Image is selected to compare to. Also fixed problems with A|B label not being updated when shift-clicking on the preview.

24-Dec-2019 – Version 8.0.22

Fixed problems with false warnings about image size change and problems with canceling from a size change warning in some cases not cleaning up the image tree correctly.

Fixed problem with the current grid setting not being checked in some cases in the drop down grid menu from the main tool bar.

Fixed problem with tool tips getting cut off at the bottom of their parent window.

Added new Fill transformation (under Transformation/Tools). This tool lets you set one or more fill points and it then does a flood fill around each point to determine a fill region. The fill region is then filled with a selectable solid color. Each fill point can have its own fill threshold and fill color. See the help file or Transformations.pdf for more details.

22-Dec-2019 – Version 8.0.21

You will need to download and install the full version to get some new bitmap images.

Added a tool bar to the top of the main window to control the border color (the color displayed surrounding images in the main image area). The three options are: set the border color according to File/Preferences or set the border color to black or white. This lets you quickly toggle the display between the different border colors. For full screen display, the image is now displayed surrounded by the border color. Also added a new keyboard shortcut: Ctrl-B which cycles through the three border color options.

Fixed some issues with adjusting dynamic range slider controls.

Fixed problem in Levels and Color Tool causing it to work incorrectly and possibly crash for 16-bit black and white input images.

Fixed several problems with split screen scrolling by dragging the hand cursor in certain special cases.

19-Dec-2019 – Version 8.0.20

Zoom Blur: now lets you drag the center of the zoom to any desired location in the input image.

Added a few new picture frame images for the Frame transformation.

Fixed problems with clicking probes outside the input image.

Levels and Color, Levels and Color Tool, Autorange, Color Negative: reworked dynamic range sliders to use one consistent code base. Shift-clicking on the dynamic range slider sets it to full range; Ctrl-clicking resets the sliders to the tic marks (if any).

When saving script files as a side effect of saving image files, the script file name is now added to the recently used file list at the bottom of the File menu.

Fixed numerous problems with saving files whose filename includes period, such as "a.b.c". Also added a check for correct extension when saving settings files.

Edited the warning message you get when replacing an image which has size-dependent downstream images.

14-Dec-2019 – Version 8.0.19

Hotspot: now lets you drag the center of the hot spot to any desired location in the input image.

Added new Geometry/Size to Fit transformation. It resizes a cropped area of its input image to the same dimensions as its output image using one of four different methods. See the updated help file or Transformations.pdf for details.

Script files are no longer stored by default in the Scripts folder. The default location is now the last folder to which any image or script file was saved. When opening or saving scripts from the main menu, their names are now added to the recently used file list at the bottom of the File menu. Workspace scripts are not affected by this change.

Updated to ExifTool 11.79.

10-Dec-2019 – Version 8.0.18

Save Workspace Script with Image Names: this command now names the image copies it saves along with the script with filenames that reflect the original filename of the image, if any. If there is no original filename (e.g. if the original file was the result of a Paste command), images are simply numbered. If there is an original filename, the copy is named with the same filename (with the extension replaced with .tif), so you can tell where it came from. If this would result in a duplicate filename, the image is numbered instead.

Export: until a folder has been specified, a prompt is now displayed in the folder field.

The File Open dialog box now lets you set an optional caption for the Windows File Open dialog box used to select files. This can be helpful, for example, when saving a script without names and there is more than one file to open. The caption can then be configured to tell the user which file is being selected when the File Open dialog box is displayed while opening the script file. If no caption is entered, the default "Open Image Files" caption is displayed.

Copy Transformation: now ungrayed when workspace is empty, generates gray checkerboard when no input image is available.

Texture Transformation: fixed problem when angle sliders are positioned so the white slider is to the right of the black slider.

File/Export, File/Print: switching to a different image now cancels any pending export or print command instead of executing it.

New Edit/Convert to Copy command (also right click menu on top level images). This command converts a top-level image (typically a File Open or a Paste) to a Copy transformation. You can use this to save a set of operations you want to load and apply to images in the future, a little like a subroutine. To do this, first build a workspace that applies the transformations you want to save, to a sample image. Then replace the top-level File Open with a Copy, select the result image, and save the script. To use it, open the script into another workspace and use the Copy

to select the image you want to operate on, and all the operations in the script will be applied to the image you selected. If you have more input images, replace them with a Copy also. I spent most of the last week working on a much more general solution to this problem, but it just got more and more complicated, so I tore it all out and implemented this much simpler approach.

29-Nov-2019 – Version 8.0.17

Wave transformation: fixed problem of dpi setting being set to zero in its command line.

Added support for reading (but not writing) HEIF/HEIC files (new iPhone image format). This requires a codec that is included with Windows 10 since version 1803, so it may not work with older versions of Windows although you can download "HEIF Image Extensions" from the Windows Store. I noticed one of the HEIC sample images I found on the web comes in upside down, but it looks like it was photographed that way.

Fixed problem with tool tips cut off at the edge of the parent window.

Crop: added a button to set the crop box to match current view of the input image, reflecting zooming and scrolling.

Save Workspace Script with Image Names: this command now names the image copies it saves along with the script with filenames that reflect the original filename of the image, if any. If there is no original filename (e.g. if the original file was the result of a Paste command), images are simply numbered. If there is an original filename, the copy is named "copy of(original filename)", so you can tell where it came from.

27-Nov-2019 – Version 8.0.16

Fixed problems with image area scroll bars disappearing in some cases.

27-Nov-2019 – Version 8.0.15

Warp: holding down the shift key while dragging one of the vertices of the overlay grid constrains it to move only horizontally or vertically.

Fixed problem with loading default file save script preferences from previous versions incorrectly. If you have used 8.0.12 – 8.0.14, check your File/Preferences/Set Default File Save Options to make sure your default include script settings are correct. If not, you should be OK using this latest release.

Fixed problems with image area scroll bars disappearing in some cases.

In Scroll Mode, when using the mouse wheel to zoom in, the part of the image at the cursor location is centered, to the extent possible. This facilitates zooming in on a specific part of the image.

26-Nov-2019 – Version 8.0.14

Finally fixed problem with dragging windows from one monitor to another if their scale factors were different.

Fixed a couple of minor problems in Watermark transformation.

25-Nov-2019 – Version 8.0.13

Fixed bug that could cause Picture Window to go into an infinite loop when canceling a transformation after just starting it. This bug was accidentally introduced in 8.0.11 when adding code to automatically close open transformation dialog boxes.

Watermark transformation: eliminated the Transparency slider and changed the Watermark Mask to and amount control. This lets you set the transparency by adjusting the amount slider or create a mask for the watermark image.

25-Nov-2019 – Version 8.0.12

Levels and Color Tool: performance optimizations.

Quick Pick: the first letter you type now matches the first letter of any word in the transformation name -- not just the first word. For example "g" now matches "Linear Gradient" as well as "Grid".

File Save: the proposed version number is now determined by adding one to the largest existing version number for the file in its folder. This guarantees the version with the largest number is the most recently saved (assuming of course you do not rename the files yourself).

File Save and File Export: when saving or exporting image files or when specifying file save preferences, there is now a new script option – Include script with image copies. This lets you save all the original files along with the final image and a script to rebuild the final image from the original files.

Added a new Watermark transformation for applying a watermark or logo image to a photograph. See the updated help file for details.

22-Nov-2019 – Version 8.0.11

Levels and Color Tool: fixed problem with mask overlay not being removed when clicking OK or Apply in some cases. Added a Mask Only button to the Mask Transparency tool bar.

Added a keyboard shortcut (Ctrl-R) to reload the last settings for the currently open transformation dialog box, if any.

Quick Pick: increased dialog box height to 90% of main window height.

Transformation dialog boxes that are left open are now automatically closed (by simulating a click on their OK button) when either selecting a new image, or when starting up a new transformation. Previously, recalc would stop when reaching an image whose transformation dialog box was open, even if it was currently hidden.

Clone: enabled split screen display in the case of no source image specified.

20-Nov-2019 – Version 8.0.10

Fixed problem with missing cufft_10.dll.

20-Nov-2019 – Version 8.0.9

New Levels and Color Tool (Transformations/Tools/Levels and Color). This lets you paint color and brightness adjustments directly on the output image, thus replacing some of the missing tools from PWP 7.20 that let you adjust brightness or saturation by painting on the image. I also plan a similar Adjust Tool which will provide even more adjustment options. See the help file for

more details. There are two new tool bar bitmaps added which you will need to download the full installer to get.

Quick Pick: Now displays the most frequently used transformations at the top of the list – frequency statistics accumulate as you use Picture Window. You can select up to nine of the most often used transformations by typing its number. Transformation selection by letter continues to work exactly the same as before.

New Starfield transformation under Special Effects – it applies a random, simulated starfield to a background image.

Layout: inputs are now cleared on Reset and before loading a saved settings file.

cufft_10.dll is no longer required (it was used only by the Texture transformation to perform 2D inverse FFT using a graphics card) which significantly reduces the size of the installer. Parallel execution via multiple threads is now used instead of the graphics card – still quite fast if you have a new computer with multiple cores.

Tooltips: fixed problem causing a display tooltip to block certain keyboard input such as Quick Pick. Still does not work with keyboard shortcuts however for some unknown reason.

Confirm Profile Conversion dialog box: added a help button and a corresponding help topic to clarify what it does.

It looks like recent Windows 10 updates have broken something concerning dragging windows between monitors with different scale factors. Until this is fixed, or until I figure out a workaround, I recommend setting the same scale factor for both monitors to avoid the issue.

Step Wedge Transformation: you can now set the spacing between patches as low as zero.

7-Nov-2019 – Version 8.0.8

Added a new Orton Effect transformation (under Special Effects) – see the updated help file or Transformations.pdf for details.

Composite: Added arrow buttons that show up when Alignment is set to something other than None. Clicking one of the buttons shifts all the alignment points in the input image by one pixel in the direction of the arrow. Holding down the Shift key shifts in ½ pixel increments instead.

Updated DoF (depth of field calculator) for both Windows and Android.

2-Nov-2019 – Version 8.0.7

Calendar, Layout, Text: Added error checks for scripts that reference uninstalled fonts. Arial is substituted for nonexistent fonts.

Line and Arrow, Drop Shadow, Red Eye Removal: Fixed problem with changes not showing up when transformation was edited.

Fixed problems with transformations not restoring the state of the display tool bar when edited.

Print Transformation: fixed problems with displaying and adjusting cropping rectangle.

Unsharp Mask: fixed problem with mask settings not being saved on exit.

Unsharp Mask: fixed problem with halo limits being reversed for 16-bit B&W and 48-bit color images.

30-Oct-2019 – Version 8.0.6

Fixed crash if My Pictures folder is unavailable at startup.

Fixed problem with cufft64_10.dll missing error message on startup.

30-Oct-2019 – Version 8.0.5

Gaussian Blur: fixed problem with missing limit on dialog box size.

File Open: fixed problems with reloading an updated version of a currently open image.

Removed the Del keyboard shortcut as it interfered with editing text controls.

Crop: fixed problems when cropping rectangle gets reversed by dragging one edge past the opposite edge.

Paint Tool: fixed problems with incorrect brush radius when editing transformation.

Resize: fixed problem with illegal value error messages for 2nd and 3rd inputs.

Fixed problem with various transformations causing bypass to be set inconsistently if the display was set to show the input image at the time OK was clicked.

Updated to CUDA 10.1 toolkit.

25-Oct-2019 – Version 8.0.4

Levels and Color: fixed problem causing result image not to be computed correctly if no settings are changed and you just click OK.

Fixed problems with smoothed histogram display.

Compare transformation: fixed problem with A/B label not changing during Blink operation.

Modified keyboard shortcuts: Numeric keypad + and – now zoom the current image in or out. If the screen is split, just the right half is zoomed. Numeric keypad * toggles between zoom to 1:1 and zoom to fit. Shift +, – or * zoom the left half of a split screen display. Del closes the current image (with confirmation).

Precise Gaussian Blur: radius values are now consistent with Gaussian Blur. Existing scripts should still work as before.

Advanced Sharpen: inverted the difference preview.

Layout: setting Proportions to Fit in Panel now resets the cropping rectangle for the current panel, if any.

20-Oct-2019 – Version 8.0.3

Color Curves: fixed problem with histogram display when RGB/All is selected.

Added updates to help file section about integration with other applications, especially Raw Therapee.

Fixed minor issues with the dialog box that lets you select a new file or switch drive letters if a file is missing when a script is run.

Autorange: fixed problem causing incorrect setting of dynamic range slider on startup in some rare cases.

Fixed typo in version check file on server causing spurious message about needing an update when using the Help/Check for Update command.

15-Oct-2019 – Version 8.0.2

Updated version number to first official release – version 8.0.2. No other changes to program.

You no longer need to uninstall the old version before installing the new version. The old version is automatically replaced.

12-Oct-2019

Fixed some problems with drag and drop for high dpi monitors.

Fixed problems with dropping files from 32-bit applications.

10-Oct-2019

Fixed problem in scaling of full-screen images.

Smudge Tool: fixed problem causing brush to disappear.

6-Oct-2019

Fixed problem in palette tool causing it to stop tracking the cursor if one of its color pickers was opened and another minor problem.

Modified tool bars slightly – when you have a group of buttons that are acting like radio buttons, pressing one that is already down re-sends its status; previously it was ignored. For example, clicking on one of the mode buttons in the main tool bar (Scroll / Histogram / Palette / Magnifier / Readout) now re-activates that mode. Previously the click was ignored.

4-Oct-2019

Fixed problem saving files opened as DNG.

Fixed several problems with tablet support.

2-Oct-2019

Advanced Sharpen, Bilateral Sharpen, Denoise, Unsharp Mask: When showing the difference between the output and input images, they are now subtracted in the reverse order so the difference image is brighter or darker where the output image is brighter or darker than the input image.

Clone, Smudge and Mask Paint tools: now support the same tablet pressure settings as the Paint tool. Several problems with the pen were also fixed. Systems without a tablet should be unaffected.

For those transformations with in-dialog previews such as Gaussian Blur, Unsharp Mask, etc., dragging on the preview scrolls it as before, the preview is no longer redrawn until the mouse button is released.

Masks transformation: fixed a couple of problems, one of which could have caused workspace files to crash with a missing command line error message.

Fixed minor problems with restoring maximized image browser at start of session.

Slide Show and Display Image Full Screen: images are now always scaled to full screen even if it means zooming in – previously image were never displayed at greater than 1:1 zoom factor.

Added support for reading (not writing) DNG files, but you need to download and install **Adobe DNG Codec 2.0** first. There may be a problem with reading image orientation, so vertical format images may come in rotated. **Adobe DNG Codec 2.0** (not to be confused with Adobe DNG Converter) can be downloaded from the website.

27-Sep-2019

Reduced help file size by almost 40% and eliminated a couple of large bitmaps from the install script. This make the install file more than 35MB smaller.

Added the option to download load only the latest executable file. This is less than 2MB instead of the 211MB for the full installer. The download is in the form of a zip file – just double click on it after downloading and drag the PWP 8.0.exe file from the zip file to the folder where Picture Window Pro is installed (normally C:\Program Files\Digital Light & Color\Picture Window Pro 8). This updates the main program only and not the help file, user interface bitmaps, or other supporting files.

For those transformations with in-dialog previews such as Gaussian Blur, Unsharp Mask, etc., clicking on the input image re-centers the preview as before, but re-centering no longer occurs when moving the cursor with the left button down as this caused excessive redrawing of the preview.

When saving JPEG and TIFF files, any preview or thumbnail images from the original file are now removed as they no longer correspond to the updated image. Previously the thumbnail was copied from the original file along with all the other metadata.

Began working on adding support for Wacom and other compatible tablets. The About box now reports whether an available tablet was detected or not at startup. Added Stylus Pressure settings to the Paint tool to control what effect, if any, that stylus pressure has on the current stroke. Clone and Smudge tools and Mask Paint tool are coming once the paint tool is working smoothly.

I have requested that the developers of the installer software we use add Select All and Select None buttons to the File Associations dialog box.

21-Sep-2019

Scratch Removal: improved algorithm that decides where to insert new controls points.

Curve Control: the settings menu now has an option to smooth histograms. This can also be set as one of the default curve options via File/Preferences.

The Workspace Scripts folder is now automatically created the first time you create a workspace script.

16-Sep-2019

Scratch Removal: added progress indicator, fixed some problems and greatly improved performance.

Updated to ExifTool 11.65.

15-Sep-2019

Multi Color Balance: fixed problems with clicking channel tabs or curve control points when dialog box is resized. Also, you can now drag control points on the curves in RGB mode.

Scratch Removal: reworked transformation to handle curved scratches and to improve the interpolation. For details see the help or Transformations.pdf. The new version should work with scripts using the old transformation, but older versions will not read new script files that include scratch removal.

10-Sep-2019

Histogram Tool: increased the resolution of HSV and HSL hue-saturation histograms. Expansion slider now only updates when you stop dragging it.

Changed the way tool tips are displayed – starting up Stack Images is now much faster.

Comctl32.dll is no longer used by Picture Window. This may eliminate some Windows compatibility or instability issues as many different versions of this DLL were issued by Microsoft over the years.

Stack Images: now displays a gray checkerboard for its output image if there are no input images.

Print: after printing, the image just printed now remains current.

2-Sep-2019

Mask: changing mask tools now restores control to the mask dialog box.

Clone: unused inputs are now removed when you click OK or Apply.

File Open: you don't select a file for File Open when loading a script, you now have several options – try again, continue with error, or abort and clear workspace. If you continue with error, the caption is reset to File Open.

31-Aug-2019

Stack Images: Added an item to the Settings Menu called "Load a Set of Images...". This clears out any current images and resets all the curves and amount controls and then lets you select one or more image files. If a file is already loaded, the loaded copy is used, otherwise each file is opened in a new top-level image. The opened files are then selected as inputs to Stack Images. This saves a lot of time opening and selecting each image one at a time. Also fixed a minor problem with Stack Images when dragging the dialog box from one monitor to another with different scale factors.

Stack Images: added Exposure Compensation slider for Filter and Subtractive Filter operations.

Blend: fixed problems with black and white input images.

Masks: fixed problem causing output image not to be generated when the dialog box opens.

Batch execution was crashing – disabling Visual C++ whole-program optimizations seems to make the problem go away so this may be caused by a bug in the Microsoft compiler.

30-Aug-2019

Progress indicators now suppressed while batch jobs are being processed. Improved responsiveness of Terminate Batch Process button.

Added new Light Falloff transformation – see updated help file or Transformation.pdf for details.

Fixed problems with several transformations leaving the cursor set as a crosshair instead of returning it to a hand.

29-Aug-2019

Clone: fixed redundant warning about image size change.

Clone: Fixed problem with 22-Aug version causing first stroke to be lost and number of strokes to be off by one. Cloning scripts that saved using the 22-Aug version may need to be corrected and re-saved.

File Save: removed redundant overwrite warning, and fixed problems of not setting initial file type to match original file and not being able to change the file type on a Save As.

File Save: added warning if saving a file and the original file is missing (probably renamed or deleted) as this prevents saving metadata by copying from the original file. Also fixed missing metadata when a file is written over the original copy.

File Open: fixed problems with File Open Multiple when selecting a single file. Also fixed problems with single step batch button.

Image Info: fixed problem with Command control obscuring the tabs in some cases.

Mask: fixed problem with Undo followed by change of mask mode followed by Apply not registering the mode change.

Mask: fixed a problem that was causing intermittent crash when applying a series of complex polygons or splines.

27-Aug-2019

The Show Clipped Pixels tool bar now reflects the current highlight and shadow colors. Changed default show color from yellow to cyan.

Primaries: Added a Direction control and updated help and Transformations.pdf.

File Open: fixed problem with opening multiple files. Also fixed problem with deleting all files in the list not closing all images that depend on the File Open.

Fixed still more problems with dragging certain modal dialog boxes (such as Preferences and Color Management) between monitors with different scale factors.

26-Aug-2019

Fixed problems with dragging dialog boxes from one monitor to another with a different scale factor.

Clone: fixed problem causing unnecessary warning after clearing cloning.

Autorange: added dynamic range sliders to set dynamic range of output image (similar to the one in Levels and Color).

Scripts: when opening a script or workspace script saved without names, you can now select multiple files. The first one is processed immediately, and the rest are stored in the File Open file list for subsequent batch processing. Deleting all the files in the list now gives you the option to remove the entire branch.

Added a new transformation: Transformation/Color/Primaries. This transformation is loosely related to how I think the Camera Calibration controls in Lightroom work. Some folks use these Lightroom sliders to adjust the saturation of different colors in their images. For me, this seems awkward, but I haven't used it enough yet to get a good feel to how and when to use it. If it turns out not to be useful, I may remove it later. See the updated help file or Transformations.pdf for a description and some tips on using it.

22-Aug-2019

Fixed problems with File Save commands garbling filename and starting in wrong folder.

Fixed problems with File Open not defaulting to last opened folder.

21.5-Aug-2019

Fixed problem causing saving settings files and some other files to lock up Picture Window.

Fixed problems with File/Open Multiple command.

21-Aug-2019

Fixed problem with the view mode that displays only the image browser.

File Save: fixed auto-incrementing version numbers.

Fixed problems with loading saved float curve files.

Add Texture: added new features to provide different methods for applying texture (see help file or Transformations.pdf for details)

Crop and Tile: fixed problems when input image size changes while dialog box is still open.

Modified code to select pathnames for opening or saving to stop using obsolete methods.

Grid transformation: increased limits on number of grid divisions to 9999 and line widths to 100.

Amount masks: fixed problem causing potential mask images to not show up on the mask menu in some cases.

Mask: fixed problem with overlay not being erased after Apply for various mask tools and problem with not being able to drag right and bottom sides of the bounding box for the Polygon and Spline tools.

Image Info: fixed problem causing incorrect placement of some controls.

14-Aug-2019

Clone, Paint and Smudge: If the input image size does not match the original image size, you now have the option of clearing all the strokes before continuing. Also, when saving settings as the default, no strokes are saved.

Compare: fixed flashing at top of preview area.

Speck and Scratch Removal Tools: fixed problem causing previous action of tools not being displayed when editing the transformation.

Speck Removal: added a new speck removal method. The old method interpolates image data across the speck in the direction that provides the best match across the speck. This works well if the background has no texture and is well approximated by a linear gradient. The new method searches around the edge of the speck for a patch that most closely matches the area around the speck and then copies the patch over the speck. This method does a better job of retaining the texture of the image but may not work quite as well if the background is smooth. Both methods are pretty good at preserving edges near the speck. Also, specks other than the current one, are now displayed with a small circle in their center to make them easier to select.

12-Aug-2019

Fixed problems in some cases with main image area scroll bars when zooming in.

Added a probe to color line controls similar to the probe for curves. The probe is enabled in the Tint, Adjust (for black and white input images) and Monochrome transformations. Clicking and dragging on the input image displays a red line at the corresponding gray level in the color line. Shift-clicking on the input image inserts a new control point there. The line goes away when you release the mouse button. If you create a color picker window to select the color of a control point, the color picker takes over the probe, but when you close the color picker window, the probe reverts to the color line.

Fixed problem with the Display Full Screen command (Ctrl-F) not working on splitters or side branches.

10-Aug-2019

Image Browser no longer shows up as a separate item on the task bar.

Create Profile: fixed problems with 24-patch ColorChecker reference files.

Drop Shadow: fixed problems with having transformation open at the same time as a drop shadow control (e.g. in the Text transformation).

Converted remaining transformation and other dialog boxes so they preserve text and control sizes when dragged between monitors with different scale factors.

When saving files, the extension is removed so it updates automatically when changing file types.

3-Aug-2019

Fixed recently introduced problems with Quick Pick.

Started converting transformation dialog boxes so they can preserve text and control sizes when dragged between monitors with different scale factors. It will take me a while to work my way through the list in approximately alphabetical order. So far, the following have been converted:

Add Border, Add Texture, Adjust, Advanced Sharpen, Line and Arrow, Bilateral Sharpen, Blend, Brightness Curve.

2-Aug-2019

Fixed more problems stopping PWP from running on systems before Windows 10 version 1703.

1.5-Aug-2019

Fixed error message regarding missing SetThreadDpiAwarenessContext for versions of Windows before Windows 10 version 1703. Some high dpi monitor features may not work fully on older versions of Windows. If you have only one monitor or if your second monitor has the same scale factor as the main monitor, everything should still work OK.

1-Aug-2019

Added an "Autosave on OK" setting to File/Preferences – if enabled, it saves the current workspace under the name "autosave.workspace" every time you click OK or Apply in a transformation dialog box. This lets you recover your work up to the last completed transformation in the event of a crash.

Color Balance: fixed problem causing initial auto white balance not to be computed when transformation starts up.

Image browser: clicking on the bypass button no longer does a zoom to fit. If the input and output images are the same size, this now lets you quickly switch back and forth between them while zoomed in or out.

Layout: fixed problem in Border tab of input image control not being hidden and showing up under the Border Color control.

When loading or saving workspace scripts, the default is now always to ask for a pathname.

Crop: fixed crash when selecting None as a custom composition guide.

Clone: fixed problems with switching display between input, output and split screen being out of sync with clicking on the main image or input image thumbnails.

Main Display: I discovered, much to my embarrassment, that I never enabled DPI awareness for Picture Window. On high resolution monitors, images were being scaled by Windows according to the scale factor in the Display control panel and thus blurred if the scale factor was greater than 100%. Having now fixed this, images are much sharper on high dpi monitors and images displayed at a zoom factor of 1:1 are consequently smaller. I am still working through some remaining window scaling issues that show up if you have two monitors with different scale factors, and you drag dialog boxes from one to the other. Currently, this only works for the main window, the image browser, mask and color picker windows – for other dialog boxes, the size of the text and controls may change when you drag them between monitors.

20-Jul-2019

Color Balance: fixed problem causing internal error when transformation is inserted at the top of a new branch.

All transformations that accept auxiliary inputs: fixed problem causing no image to be selected when the transformation is canceled right after opening it.

Fixed problem causing crash on File Save after saving and reloading a workspace file.

Mask: fixed problem causing crash in some cases on Mask Reset if a default mask settings file was in effect.

17-Jul-2019

File/Collapse: fixed problem causing metadata to be lost when file is saved.

Image Browser: if a transformation has more than 3 inputs, inputs are reduced in size as necessary to keep their combined width at 3 input thumbnails.

Layout: fixed problems with the image browser not being updated when inputs were added or removed.

Fixed some problems with filenames and version numbering on File Save.

Mask: ensured that default file type when saving masks was set to TIFF.

15-Jul-2019

Alt-click on a thumbnail in the image browser now makes the image current and, if the new image is the same size as the previous current image, also preserves the previous zoom factor and scrolling position. This lets you compare the same area of interest across several different versions of the same image.

File Save As: added code to deal with adjusting filenames to be unique when switching folders or file types within the Windows File Save dialog box. First it tries to save with a version number of " v1". If the file already exists, it adds " v2". If that exists, it tries " v3" and so on up to " v999". If you type a filename or select one by clicking on an existing file, no version number is added. Unfortunately, adding this feature causes Windows to revert to an older style of its File Save dialog box that looks a little different from the modern version. There is a workaround to this but it involves rewriting a lot of code so this will not get fixed for a while.

The image-last-saved information (the S and M icons displayed in the image browser and the Saved As pathname and date and time in Image Info) are now cleared when loading scripts.

Added new File Collapse command. This is a convenient shortcut for use when you want to save a modified version of a file over the original. Note that this is a form of destructive editing that saves the modified image but does not save the editing steps used to create it. Collapse replaces the entire current branch with just the current image and saves the current image over the top-level image in the branch. The result is to collapse the current branch down to just one image which is saved without any script. See the help file for details.

Monochrome: fixed problems with probe not working when the Curve tab was selected.

Clone: fixed problems with clicking on image and input thumbnails in image browser.

11-Jul-2019

Smudge, Paint: fixed problem causing uncontrolled results when doing too rapid a series of strokes in some cases. Now, strokes initiated before the last stroke is finished processing are ignored.

Clone: input thumbnails are now captioned with the names of the images they come from.

Recalculation: eliminated unnecessary processing of branches and splitters.

File/Color Management: added a setting to let you disable color management of image browser thumbnails. This makes the image browser display much faster but colors in the thumbnails

may be shifted from those in the main image area which are always color managed assuming color management is enabled. If color management is disabled, this setting has no effect.

8-Jul-2019

Fixed problem with Edge transformation for 24- or 48-bit color input images, operation = Compute, Color Space = HSV or HSL, and Amount < 100%.

Updated the description of cloning from one image to another in the help file.

Clone: fixed problem causing no image to be selected after an immediate Cancel.

Clone: fixed problem causing remnants of the overlay circle to be left behind while cloning.

Clone: fixed problem causing uncontrolled results when doing too rapid a series of strokes in some cases. Now, strokes initiated before the last stroke is finished processing are ignored.

Print: fixed problems with cropping overlay in input image.

Clone, Paint, Smudge: added commands to Settings menu to Save as Default Brush and Clear Default Brush. The default brush file is loaded on startup if present, providing a way to initialize the brush settings for these transformations. Also, settings files for these transformations now save and restore the current brush settings. Now when the transformation are editing, their brush settings are restored.

Fixed some problems in loading saved brush files.

The "S" icon in the image browser that indicates an image has been saved now changes to an "M" if the image has been recalculated (and thus potentially modified) since it was last saved.

Hotspot: changed the way the transformation darkens images from multiplicative to subtractive.

4-Jul-2019

Added new transformation called Gray/Hotspot for darkening the central hot spot you often get when taking IR (infrared) photographs.

Clone: changed default Overlap setting to Yes to correspond to the way PWP 7 works.

Clone: fixed problem causing crash when specifying an input image but not creating any strokes and then clicking OK.

Clone: fixed various problems with switching between cloning from one image to another followed by cloning within the output image and then clicking Undo.

Fixed problem with dependency logic that was failing to identify some downstream dependencies.

For transformations that take auxiliary inputs (e.g. Clone, Composite, Filter, etc.), the display buttons at the top of the transformation dialog box now display the following two images, depending on the button pressed:

Input Only Button: displays the input image, if any, if the transformation image is selected in the image browser – displays the auxiliary input image if an input thumbnail next to the transformation image is selected.

Output Only Button: displays the output image.

Both Button: displays the input (as defined above) and output side by side.

Mask: fixed problems with mask speck removal tool.

When canceling a transformation, the partially computed output image is now set to all black.

Gaussian Blur: modified Orton effect settings file.

26-Jun-2019

Paint and Smudge: added code to prevent processing a new stroke until the last one is completed.

Clone, Paint and Smudge: fixed problem of control returning to transformation dialog box after each mask operation.

Add Border: fixed problem causing possible slight softness of edges when specifying a rectangular border with 0% softness.

Clone: fixed problems with Lighten Only and Darken Only modes and some issues with Undo.

Texture: added Equalize checkbox and now include settings files to create Mezzotint textures when installing Picture Window.

23-Jun-2019

File Open: fixed problem causing switch to new file not to show up in the caption of the main image area.

Fixed problem causing the image before a splitter to be un-bypassed when the splitter is removed by closing its next-to-last branch.

Clone: added code to prevent processing a new stroke until the last one is completed.

21-Jun-2019

Warp: fixed problems if Bilinear warp option selected from settings menu. Also fixed a problem with the Proportions slider.

Fixed problems with Grid setting in main tool bar when switching images.

Updated to ExifTool 11.52

Closing a top-level image now makes the image to its left the current image. Closing the leftmost top-level image makes the image to its right the current image.

Removed some redundant code to save metadata in TIFF and JPEG files. When overwriting files, old version (and its associated script file, if any) is now deleted before writing new version.

19-Jun-2019

Clone: fixed problem with Fade slider not working correctly.

Added zoom to fit after toggling bypass setting via the image browser.

Added missing "S" icon bitmap to installer – this should fix the problem of the S not showing up in the image browser when an image has been saved.

Clone: fixed problem of source and target circle disappearing when releasing the mouse button.

16-Jun-2019

Level: fixed problems with Reset from settings menu.

Warp: fixed problems with the way output image size is computed from the size of the cropping quadrilateral.

Editing a bypassed transformation now turns off its bypass before editing and recalculates all images that depend on the one being edited. This also fixed some related problems with reloading scripts that contained bypassed transformations and then trying to edit a bypassed transformation.

Fixed problem with cloning a side branch just below an image whose transformation dialog box is open. This now forces all the side branches to be recalculated to avoid having them get out of sync with each other until the dialog box is closed.

11-Jun-2019

Added a saved (S) icon to the image browser displayed next to the close (X) button that indicates if the image has been saved. This does not get cleared if the image is subsequently modified, so it does not guarantee that the latest version has been saved, just that the image was saved at least once since it was created. The name and time the image was saved are available via the Image Info command.

Added new Denoise transformation.

Two Zone and Three Zone: fixed problems with displaying incorrectly when editing or canceling the transformation.

8-Jun-2019

Monochrome: fixed problem causing background histogram to be missing in the Curve tab when editing the transformation.

Omitting the extension when saving a file now sets the extension automatically to the default in all cases. Previously, it worked this way in some cases but not others.

Updated to ExifTool 11.49

5-Jun-2019

Added an option when encountering a missing file when loading a script to change just the drive letter. This makes it easier to locate missing files when switching between computers with different drive assignments.

Fixed problem causing occasional crash when navigating to pathnames to load or save.

3-Jun-2019

Added support for Topaz Sharpen AI under File/Plug-Ins.

Layout transformation: panel Color/Image control is now hidden if panel background is set to Transparent. Transparent panels are useful for positioning text within a layout.

Fixed several problems with Oval, Linear and Sweep Gradient transformations.

Mask: fixed crash when resetting a mask via Amount control menu when that mask is referenced by a subsequent transformation. The missing mask is replaced with an all white mask until the original mask is restored.

28-May-2019

Fixed problem with size of curve control in Oval and Sweep Gradient transformations when Curve is selected instead of Color Line in the Settings menu. Fixed problem with width of Scale slider in Multipoint Gradient transformation.

Added support for reading a TIFF variant used by ON1 with a pre-multiplied alpha channel.

Added support for Topaz DeNoise AI under File/Plug-Ins. While quite slow, DeNoise AI provides very good noise reduction, at least for some images. If you own the previous Denoise plug-in, the upgrade is free. Make sure you get the latest version as they just fixed a bug that made it not work with Picture Window.

25-May-2019

Fixed error message and crash in Clone transformation when loading settings or executing a script file that refers to an input image that is no longer present.

Added commands to the Settings menus for the Clone, Paint and Smudge tools to let you load or save the current brush settings.

20-May-2019

Fixed several problems with Linear and Oval Gradient Mask Tools and Undo/Redo and graying of Apply button.

16-May-2019

Modified installer to create a Picture Window folder in the Start menu.

Fixed problem in a number of transformations causing them to be initially bypassed when cloned.

13-May-2019

Fixed memory allocation problems in Clone, Paint and Smudge when being replayed from a script. Also fixed memory leak associated with undo followed by using the tool again.

Fixed memory leaks when executing Layout, Texture or Line and Arrow tool from a script.

Fixed memory leak when closing all images in some cases.

Fixed some issues with loading/saving workspace scripts recording the name of the last workspace used, incorrectly in some cases.

Fixed problem in transformations that do not preserve image size (e.g. Add Border, Crop, Warp, etc.) with zoom to fit after changing the display tool bar in some cases.

Dropping a script file or workspace script file on the main image area now opens it (but only if it is the only file being dropped).

When deleting a branch from a splitter, the remaining branches, if any, are now renumbered unless they have been assigned a name. Branches are also renumbered after reading a script or workspace script file.

10-May-2019

Fixed several problems with loading/saving workspaces. If Ask for Workspace to Save was not set in File Preferences, Save Workspace Script was not working. Other anomalies also fixed to make it clearer what is happening on Close All Images.

9-May-2019

Amount controls that have 0% in the center (Brightness and Saturation): initial mask is now black instead of gray.

Mask Separate Tool: Black and White were reversed, and subsequent operations were not always working correctly.

Blend: fixed problems with 16-bit images in filter and subtractive filter blend modes.

Mask Dialog: edited All Black, All White and Invert button bitmaps to make them easier to see. Added a new All Gray button.

Paint tool: fixed problem with scripts not replaying the first application of the brush.

7-May-2019

Fixed problems related to May 4 version, including problems not working in some cases with transformations that have their own previews.

Closing a single bypassed image via the image browser no longer recalculates the downstream images.

Fixed some memory leaks in script processing.

Fixed typo in Gamma Adjust.

Fixed problem in loading workspace scripts with color management setting batch profile mismatch.

Reworked the way workspace scripts are saved/restored on startup, shutdown and close all images. See help file under File/Preferences for details.

Added File/Clear History command – clears the recent file list at the bottom of the File menu.

4-May-2019

Speed-up of recalculation by suppressing updates of main image area until the end.

Speed-up of recalculation and reduction of memory usage by eliminating unnecessary image copies for bypassed transformations, splitters and side branches. This was a major internal change and may cause a few problems my testing has not revealed.

Fixed File Open problem introduced accidentally in May 1 update. Opening a script some of whose files no longer exist did not work correctly if you supplied a valid replacement.

Compare: fixed problem of input image not updating when recalculated.

Frame: fixed problem of auxiliary input images not updating when input image changed.

Monochrome: fixed problem with filter image selection when input image changed.

Multi Color Balance: fixed problem with error message if input image was black and white.

Updated to latest Exiftool version 11.39.

2-May-2019

Blend: Fixed some minor issues with Overlay control. Added some new Operations. Added descriptions of the Blend transformation to the help file, and Transformation and Tutorial manuals.

File Preferences: Added options to zoom images to fit (or not) after adjusting the position of the separator bar between the image browser and the main image area.

Fixed problem cloning top level images created by file open. Bug was introduced accidentally in May 1 update.

Added the ability to detect when an image was placed on the clipboard from outside Picture Window, and the Paste toolbar button is turned on.

1-May-2019

Amount controls: fixed problem causing some valid masks not to show up in the image menu.

Fixed some issues with the display and image zooming after adjusting the position of the separator between the image browser and the main image area.

Resize: fixed problem with resampling method and slider not being updated after loading a settings file.

Selective Color Correction: fixed problems with clicking outside color wheel.

Curve controls: fixed problem causing probe to be displayed initially at the left edge of the curve.

Composite, Layout, Stack Images: switching images now preserves the location of the amount slider when switching images, unless a mask is present.

Initiating a File Open from outside Picture Window (for example by dropping files on the image area, double clicking image files in Explorer or dropping files on the Picture Window program icon) now checks to see if Picture Window is busy before opening the files. If so, the files placed in a queue and opened once Picture Window stops being busy. Picture Window is busy if a file open operation is currently in progress, a batch operation is in progress, a recalc is in progress, the transformation dialog box for the current image is open, or a modal dialog box is open. This should help prevent external File Opens from interfering with any ongoing operations.

29-Apr-2019

Speck Removal: fixed problem of mode not being set correctly on startup.

All transformations: Canceling or closing any transformation dialog box now forces all subsequent images in the image tree to be recalculated in those cases where it is necessary.

Composite: fixed a couple of minor issues.

Script/Save Workspace Script: removed extraneous request to close all images before loading.

Trying out a new transformation called Blend – still a work in progress with no Help or manual yet. It is a simplified version of Composite that requires images to be the same dimensions and does not do alignment. All it does is combine images using a selectable Operation. It does add a few new Operation settings, and it also adds an exposure compensation slider for filter

operations and a strength slider for subtract operations. It could potentially replace Filter and Difference at some point.

File Preferences: removed workspace color setting which was not being used.

Fixed problem causing "Error loading settings from last session" error on startup right after first installing PWP.

27-Apr-2019

Layout: fixed problem with panel size in pixels being displayed one larger than it was in some cases.

Reworked code for saving/restoring workspace on exit/startup – see help file under File Preferences for details. Added a new Preferences setting to control asking to save workspace on Close All Images (or when loading a new script or workspace script).

Clone, Paint and Smudge: now preserve zoom factor and scroll position from input image when starting a new transformation.

Clone: fixed problem of no effect if you clone with a single click only.

Fixed problem with restoring gray profile color management settings when loading a script and a color management settings mismatch was detected.

Fixed problem causing PWP to crash on startup if certain Eizo monitor ICC profiles were present.

22-Apr-2019

Resize: fixed problem with entering physical width in units other than inches when set to Don't Resample.

Previous workspace no longer restored on startup if there are command line arguments.

Adjust: fixed crash when using probe to set selective color correction when editing transformation.

Mask: fixed problem causing crash in some cases after loading saved settings files that included mask settings.

Preferences: Restore workspace on startup, Save workspace on exit have been reworked. Options are now Don't restore/save or Ask to load/save.

On startup, if Ask to restore is set, you get a new dialog box with the options: Don't restore/Restore previous workspace/Ask for workspace to restore. If there is no previous workspace to restore, the second option is omitted.

On shutdown (or when doing a Close All Images), if Ask to save is set, you get a new dialog box with the options: Don't save/Save by date and time/Save with current name/Ask for workspace to save. If there is no current workspace, the third option is omitted.

See the updated help file under File/Preferences for more details.

Layout: Fixed problem that could cause a crash when moving the cursor over the preview area in some cases. Also fixed problem causing panel size to be off by 1 pixel in some cases.

18-Apr-2019

Fixed problem of transformations with their own previews updating when the dialog box was moved without being resized.

File Open can now be used to open script files, but only if you select just the script file. Attempting to include script files in a multiple file selection will result in an error message. This method of opening script files is more convenient if the script file is stored along with image files since the File/Open Script command always starts up in the default script folder, forcing you to navigate to the image folder.

Median Blur: fixed error when recalculating result in some cases if method was set to Variable radius.

Removed Extract Embedded Script command since scripts are no longer embedded. Before installing this release, make sure you have extracted any embedded scripts you want to retain in tiff files saved with older alpha versions of Picture Window.

The name of the current script or workspace script file (if any) is now displayed in caption of the main window.

15-Apr-2019

Fixed problem with incorrect profile mismatch warning in several transformations when images have same profile but different types.

Monochrome transformation now initially defaults to 16-bit output if input image is 16-bit.

Kaleidoscope transformation now produces square images instead of images of the same dimensions as the input image. Added a new Shape setting (Square or Circular).

Advanced Sharpen: fixed problem with histograms not updating correctly.

12-Apr-2019

When saving scripts at the same time as saving image files, the script name now includes both the image file extension and the ".script" extension. This prevents overwriting script files if an same image is saved in the same folder as two different types. For example, saving an image as xxx.tif saves its script as xxx.tif.script.

Levels and Color: fixed problem of Reset not recomputing black and white points correctly if color space was set to HSL at the time of the Reset.

Print command: clicking on another image in the image browser no longer leaves a print command thumbnail behind – the print dialog is closed and the thumbnail removed.

9.1-Apr-2019

Fixed problem in Frame transformation accidentally introduced in the last release.

9-Apr-2019

Cloning a side-branch in the image browser now works slightly differently – all cloned images are created with bypass off, even if the original image had bypass on. This fixes the problem of bypassed images being cloned incorrectly.

Added 4 new keyboard shortcuts – Alt-Left, Alt-Right, Alt-Up, Alt-Down to scroll the main image area. These are useful if you need to scroll while cloning or using some other retouching transformation and do not want to use the Alt-drag scrolling method.

Add Border, Composite, Difference, Filter, Frame transformations: added warnings when converting images to working color space.

Removed redundant ask to convert to working color space when opening an image from an image menu.

4-Apr-2019

Fixed minor problem in Frame with custom image and tint.

Fixed problem with mask paint tool effect not being accurately restored when loaded from a script file or when editing a transformation.

Frame transformation: fixed problem of right and bottom edges of frame being mirror images of what they were supposed to be.

Crop transformation: replaced up/down controls used to make fine adjustments to margin settings with +/- tool bars. Regardless of the units, these adjustments increment or decrement the margin settings by one pixel. Also added one more decimal place in the margin readouts for units other than pixels.

27-Mar-2019

Fixed problem causing closing an image not to recalculate the following image correctly.

Fixed problem keeping Windows from letting you eject a removable drive that PWP had just load a file from or saved a file to, until the PWP was closed.

Fixed problem in Wave transformation with custom image and tiling.

24-Mar-2019

Start of Beta.

23-Mar-2019

Fixed problem causing errors compositing 48-bit color images with color management disabled.

Fixed problems in Color Management dialog box with Load... button.

20-Mar-2019

Fixed problem causing unnecessary recalc in some cases.

19.5-Mar-2019

Fixed problem causing incomplete recalc in some cases (accidentally introduced in 18-Mar-2019 version).

19-Mar-2019

Texture transformation: now generates the same set of random patterns each time and does not advance to a new set until you click the randomize button. This lets you adjust the other

settings without re-randomizing the pattern each time. Also, each time you run the transformation it will regenerate the same texture as the last time.

18-Mar-2019

Fixed problem of certain keystrokes such as Shift-arrow keys being ignored in some cases.

Fixed crash caused by copying or moving an image using the Shift-arrow keys or Copy/Move to Destination so as to create a circular reference.

16-Mar-2019

Added new File Open Multiple command. It is like File Open, but if you select multiple files, they get added to the file list instead of being each opened in a separate window. This save an extra step when preparing to apply a batch process to a series of files.

Export – fixed problem with exporting files with no original name (e.g. pasted from clipboard) when saving with original name. This case now defaults correctly to asking for a pathname.

Made popup message boxes fully modal.

15-Mar-2019

File Export – fixed minor problems and added the ability to output a sequence of filenames.

File Open – added a tool bar button to let you sort the current file list by name or by date in ascending or descending order.

Histogram tool now updates automatically whenever the current image changes. So, if you keep it open while running a transformation you can see the histogram or waveform change every time you change the transformation settings.

Updated help and reference manuals to reflect changes and fixed some errors in the Batch Processing manual PDF.

14-Mar-2019

File Open – fixed bug causing crash if you click OK after getting a warning from a script that the file may have changed since it was last opened.

Color Picker: you can now right-click on palette colors to set or reset them from within the color picker or load or save a palette. You can still use the Palette Tool if you prefer.

Added information to Curves and Histograms manual regarding waveforms.

13-Mar-2019

Histogram Tool: fixed several problems and added support for waveforms as an alternative to histograms. The user interface was also changed slightly – see the updated help file for more information. You will need to do a full install to get the one new bitmap for the histogram tool.

8-Mar-2019

Layout: fixed problems with Fit panel – scale to dimensions and Fit panel – scale 1:1 when changing orientation direction between horizontal and vertical.

7-Mar-2019

Fixed problem in several transformations of not restoring display (input/output/split screen) setting correctly after loading settings. The display settings at the time the file was saved are supposed to be restored. Updated Orton Effect settings file to not be in split screen mode.

3-Mar-2019

Changed default color management setting for batch mismatch to Convert.

Fixed initial setting of Histogram Expand button in Curve control.

Added a couple of tips to the Transformations.pdf document for Gaussian Blur to get fog and Orton effects. Added Orton effect settings file to the full installation.

1-Mar-2019

Tile transformation fixed.

28.5-Feb-2019

Reverted back to old Tile transformation until I can fix some problems.

28-Feb-2019

Added clarifying information to the help topic for the Texture transformation.

Tile transformation: added support for oblique (parallelogram-shaped) tiles.

25-Feb-2019

Fixed crash when double-clicking on an image file in Windows Explorer to open an image in PWP while PWP was minimized.

Export: fixed problem with Resample checkbox being grayed out in some cases. Also, fixed problem with ExifTool copying the resolution and orientation settings from the original file.

Crop: fixed same problem with Resample checkbox being grayed out in some cases.

24-Feb-2019

Export: changed name of save options dialog box and updated help file to make it clearer.

Bilateral Sharpen, Unsharp Mask: added Delta button as in Advanced Sharpen to show differences in preview area.

22-Feb-2019

Added Chromatic Aberration transformation from PWP 7.20 – see the updated help file or Transformations.pdf for details.

Displace: added Tile option.

Advanced Sharpen: added button to display difference between input image and preview image.

21-Feb-2019

Added new Dehaze transformation – see the updated help file or Transformations.pdf for details.

20-Feb-2019

Smudge: removed Single/Continuous option since Single does not do anything.

Documentation and help file updates.

Kodak and Wolf Faust reference files are no longer installed automatically with Picture Window. ColorChecker files are still included. All others can be downloaded from the manufacturer's web site. Since Kodak went out of business, they no longer supply targets, and their FTP site to download reference files has also been shut down.

18.5-Feb-2019

Advanced Sharpen: fixed problem with adjusting markers introduced in previous release.

Updated Transformations manual.

All transformations with their own preview area: when the dialog box is open, recalculation now propagates correctly through the transformation if, for example, you update one of the images it depends on.

18-Feb-2019

Mask: closing the mask dialog box now makes the overlay for the masked image transparent. Editing the mask restores the overlay.

Frame: fixed problem with preview displaying at the wrong scale after clicking the preview button to update the main image area. Removed the ability to select tabs and adjust frame, mat and border widths by clicking and dragging on the preview since this never worked very well.

Fixed several problems with closing images not clearing split screen and zooming the current image to fit.

All transformations with their own preview area: fixed problems related to the preview button not being grayed out when it should be (e.g. after resizing the dialog box).

Layout: clicking the preview button (the one above the preview area in the dialog box) now automatically switches the display to show the output image.

17-Feb-2019

Fixed blinking cursor problem with a probe active.

Fixed problem with the Smudge tool applying on a single click with no drag.

All transformations with their own preview area: if the dialog box is wide enough, you can now drag a vertical separator bar to make the sliders wider and the preview area narrower or vice versa. Also, resizing the dialog box now waits until you are done resizing to recalculate the preview image, avoiding flashing and delays.

16-Feb-2019

Fixed problem with Ask checkboxes in the Default File Save Options dialog box.

Export: fixed several problems.

File Save: fixed problems with wrong profile possibly being saved with files in some cases.

14.5-Feb-2019

Fixed serious bugs in loading and saving Preferences.

14-Feb-2019

Major changes to the way metadata is saved in image files:

A copy of ExifTool is now installed along with PWP in its install folder. You will need to run the full installer copy it to the required location. After saving files, ExifTool is run silently in the background to copy the metadata from the original file, if any, to the new file. This lets you preserve all the metadata including EXIF, GPS, ICC Profile, IPTC and XMP at the cost of slower performance as it takes time to load ExifTool and it then writes the entire file a second time.

There are new Default File Save options in the File/Preferences dialog box. You will need to enter a new set of options as the old ones do not translate one for one. Currently, the metadata options are: All/All but GPS/Profile Only/None, but I could add more options by request. Options to save 16-bit images as 8-bit were removed. Saving to BMP, JPEG or GIF now automatically converts to 8-bit white TIFF and PNG never convert.

There are no longer embedded scripts in TIFF files – instead, for every type of file you now have the option on File/Save to save a script file of the same name alongside the image file.

The File/Run Embedded Script command will be removed at some point as it is now obsolete. I am still thinking about how to unembed embedded scripts for existing TIFF files. I may temporarily add an Extract Embedded Script command to handle this or perhaps this could be automatic if an embedded script is detected.

File/Export now has its own complete set of File Save options, just like the Default File Save options in File/Preferences. Existing scripts that use Export will no longer work.

Image Info: all metadata is now read-only. You can no longer use PWP to edit Notes, Author or Copyright.

The Help file has been updated for the new dialog boxes.

12-Feb-2019

Image Info: fixed problem with subject distance reporting.

Fixed problem with displaying the wrong cursor in main image area in some cases.

Continued to add to manuals.

10.5-Feb-2019

Fixed problem magnifier and other tools on main tool bar not working due to recent bug fix.

10-Feb-2019

Fixed problem with initial curve/histogram button in curve controls.

File Save: fixed crash when saving an image whose transformation is open for editing and you confirm you want to close it before continuing.

Continued to add to manuals.

9-Feb-2019

Fixed problem causing image browser thumbnail caption background to stay cyan if recalc was done with the transformation dialog box open. Also fixed potential crashes with various

transformations when resizing the input image smaller with the transformation dialog box open.

Reorganized and added material to the manuals.

8-Feb-2019

Calendar: fixed problems with settings not being restored correctly on double-click or loading saved settings file.

Color Remap: fixed problem with dialog box being displayed the wrong height in some cases and problem causing dialog box not to go away with switching to another image.

Emboss: changed the initial default angle setting so light appears to come from the upper left

Levels and Color: fixed problem with dynamic range readout not being updated on Reset.

Red Eye Removal: fixed problem with output image not being restored correctly when the transformation was edited.

Paint: fixed problems with brush overlay displaying on input image instead of output image. Like Clone, Paint is applied directly to the output image.

Tile: fixed problem causing a crash if the input image size was reduced by a preceding transformation. This may have affected other transformations as well. It is possible this bug fix will cause other problems.

Transformations and Controls documents are now complete although they could use some polishing.

6-Feb-2019

File Open: fixed problems with opening multiple files if the total length of all the file names was greater than 260 characters.

File Save: fixed problem with JPEG options being reset to defaults on re-save after summary is displayed.

Fixed problem causing program to crash sometimes when minimized and restored by clicking the task bar.

Gradient transformations: changed the initial default gradient to have 2 control points instead of 4.

Consolidated multiple documents into Transformations and Controls – still a few gaps to fill in.

3-Feb-2019

Removed Edit/Close Current Image command since it was the same as File/Close.

Removed Transformation/Color/Moire transformation since it does not work particularly well.

Added more documents to downloads page.

30-Jan-2019

Added a Maximize Box to Image Browser when it is displayed in a separate window.

Added a command with keyboard shortcut Num – to close the current image, if any. You can now use the tab key to move between the buttons in the confirmation dialog box.

Combine Channels: fixed problems with no images selected and color space set to HSV or HSL.

Also, its menu item is now always enabled since it does not need an input image to run.

Mask: fixed problem with Paint tool not applying mask mode changes correctly.

Added more documents to downloads page.

29-Jan-2019

Added more documents to downloads page.

28-Jan-2019

File Open: fixed problem causing split screen display not to be reset in some situations.

Fixed problems with a large number of transformations that would leave color pickers behind when you switched to a different transformation. Now all color pickers are closed when you make a different image current.

Added more documents to downloads page.

22-Jan-2019

Level: fixed crash at 45 degree rotate

Crop: fixed crash in some cases when cropping rectangle was flipped

Resizing the main application window now does a zoom to fit as well.

Added Layout document to downloads page.

21-Jan-2019

Added documents describing the Warp and the Stack Images transformations.

20-Jan-2019

Stack Images: fixed recently introduced problem causing immediate crash.

Print Command: fixed problem of Cancel from Windows Print dialog box leaving Print transformation thumbnail behind.

19-Jan-2019

Added a section on color management setup to the tutorial.

Added links to Blurring and Color Management documents to the downloads page.

18-Jan-2019

Amount controls: fixed problem causing mask menu to show up when clicking outside the mask image box.

Three-Zone: fixed problem with highlight saturation setting.

17-Jan-2019

Advanced Sharpen: fixed problem causing preview area to always display results of all three phases (noise reduction, speck removal, sharpening) instead of just the ones related to the current tab.

Added link to Sharpening document to the downloads page.

16-Jan-2019

Smudge: restored the smudge tool.

Frame: fixed problems with mat scale slider readouts.

PWP 8 Tutorial updated.

14-Jan-2019

Mask: fixed problem of Apply button being grayed out after loading polygon or spline shape files.

Crop: added option to preserve original image proportions – this may invalidate some scripts that involve cropping to standard proportions.

Smudge Tool disabled for now as it seems to have some serious issues.

PWP 8 Tutorial mostly finished.

12-Jan-2019

Export: JPEG quality setting now hidden unless file type is JPEG or Original.

11-Jan-2019

Export: fixed problem with adding version numbers only working the first time. Also fixed problems with saving scripts, although the script saved only covers the transformations from the File Open up to but not including the File Export.

10-Jan-2019

Export: inapplicable Include options are now grayed out depending on file type.

Continuing work on Tutorial.

6-Jan-2019

Made nearly all transformations work with 1-bit binary image input (Clone, Paint and Smudge being known exceptions). For most transformations, the binary image is implicitly converted to 8-bit black and white and then processed normally. For a lot of transformations, operating on a binary image does not produce a useful result, but at least this keeps errors from cascading through the image tree.

Brightness Curve: fixed bug that could cause a crash in Advanced Mode.

Continuing work on Tutorial.

4-Jan-2019

Zero-centered amount controls (e.g. Brightness or Displace transformations) now initialize new masks to gray instead of black.

Removed Print Setup button from Print dialog box – it turns out Windows does not allow a Windows Print Setup without also running the Windows Print dialog box afterwards.

File Open: if multiple files selected, they are each opened in their own top-level image. To open multiple files in a single top-level image as a file list, first open one of the files and then add the others to the list using the File Open tool bar.

Swap Channels: fixed problems restoring transformation when editing by double click on thumbnail.

Continuing work on Tutorial.

1-Jan-2019

CUDA: fixed problems with insufficient GPU memory by breaking images into chunks and processing them piecemeal. This should fix errors trying to sharpen large images (using the Bilateral Sharpen or Adjust transformations) using Nvidia graphics cards with insufficient memory. Also fixed a problem in Texture transformation using CUDA with certain angle ranges and dealt with problems of too little GPU memory.

Equalize: fixed problem with output curve not being recomputed when editing the transformation by double click.

31-Dec-2018

Export: fixed problem with sRGB/Gamma 2.2 profile not being applied correctly to the exported image.

30-Dec-2018

Fixed bug that could cause a crash, depending on the image size, when using more multiple threads (more likely with more threads).

Fixed problem causing crash when dragging too fast along the trackpad edge. Using the Synaptics touchpad on my laptop, this gesture is supposed to scroll, but what it actually does is simulate spinning the mouse wheel. In PWP, this generally zooms instead of scrolling. Other trackpads may work differently.

29-Dec-2018

Frame: fixed remaining problems with tinting gray tiles.

28-Dec-2018

When adding files to a File Open file list, duplicates are now ignored.

Frame: fixed problems with tinting gray tiles.

Added a Picture Window tutorial to the downloads page – still a work in progress.

24-Dec-2018

Fixed a problem causing ICC profile not to be propagated to output image in certain cases.

23-Dec-2018

Fixed several problems in Print command/transformation.

20-Dec-2018

Fixed problem causing side-branches and bypassed transformations to be computed and displayed incorrectly in some cases.

17-Dec-2018

Image Info: changes to Description, Author or Copyright are now propagated to all downstream images.

Frame: fixed problem of image borders equal/unequal bottom/unequal setting not being saved and reloaded as part of the command line. Fixed problems switching between different Base Size On settings.

Full-Screen Display: fixed problem that could cause the program to hang when performing full screen display on a second image.

16-Dec-2018

Selective Color Correction: fixed problem that checking Show Affected Region was affecting the final image, not just the preview as stated in the help file. Show Affected Region is now turned off automatically when you close the dialog box, so its state is not restored when double-clicking the image thumbnail, thus possibly preventing an unnecessary recalculation.

Crop: reworked grid settings to allow NxN up to 999x999.

Grid toolbar at the top of the main window now supports all the grid modes of the Crop transformation except Custom composition guides.

Export: now uses default JPEG chroma subsampling when saving JPEG files.

Color Management Settings: added a new setting that controls Ask on Profile Mismatch when in batch mode.

15-Dec-2018

Transformations that required a color input image now also accept black and white images by implicitly converting them to color before applying the transformation. This helps prevent strings of error messages when loading new top-level images.

File Open: fixed problem of opened files not being added to the recently opened file list at the end of the File menu.

14-Dec-2018

Mask: added new mask tool that lets you apply a brightness curve to the current mask. This can be useful if you want to increase or decrease the separation between masked and unmasked areas.

Crop: fixed problems with the cropping rectangle being applied incorrectly to new images whose dimensions differed from the original image. Added option in Settings Menu to reset the cropping rectangle for each new image when running in Batch mode.

You can now execute the Clone entire branch command even if the current image is not at the top level.

File Open: Clicking Cancel right after issuing a File Open command from the main menu now closes the File Open dialog box instead of leaving a gray checkerboard file behind.

Added help button to color picker.

13-Dec-2018

Added a Terminate Batch Process button to the batch status dialog box.

Main menu and tool bars are now disabled during batch operations. They are re-enabled when the batch process completes or is terminated.

Scripts saved without pathnames now just ask for pathname when opened instead of reporting a missing file.

File Open: fixed problems with filename not being displayed as the Image Browser caption.

Applying the Clone Top Level Image command to a branch that starts with a File Open now clears the file list in the cloned version of the File Open. This in turn causes it to ask for new pathnames, which effectively replaces the functionality from the old style File Open that let you clone the branch when double-clicking on the File Open thumbnail. So now to get the same effect, right click on the thumbnail instead and select Clone Entire Branch from the context menu (or from the Edit submenu).

Fixed problems with rename currently open file option on File Save As... when trying to save to a file that is currently open.

12-Dec-2018

File Open: bug causing crash after running a script that does not include pathnames. Canceling when asked for a replacement file now removes the entry from the file list and, if no files are left, substitutes a checkerboard placeholder file.

Monochrome: fixed bug causing crash if its input image was a black and white image.

11-Dec-2018

File Open: fixed problems with File Open from Default command. Added the ability to select multiple pathnames in the file list – the Remove from List and Run buttons on the tool bar now remove or run all the selected files. There is now a current file (marked with a red dot) as well as a separate set of selected files. See the help file for details. Fixed problem opening files with metadata indicating camera profile which in turn caused Full Screen Display to fail.

File Rename command is now available again within File Open via a button on its tool bar. A full install is required to get the new Rename icon bitmap.

Batch processing: breakpoints now mostly working

Removed the ability to drop files onto File Open thumbnails in the Image Browser as this was not working correctly in all cases. You can still either drop files into the main image area (which opens each one in a separate window) or into the File Open transformation dialog box (which appends their pathnames to the current file list).

Fixed problem with not being able to edit File Open transformations created by selecting a pathname from the recently opened files list at the bottom of the File menu.

Fixed problem with scripts saved without pathnames giving "Missing end statement" error when opened.

Fixed problem in Full Screen Display – it now displays the same image as the main display.

Add Border: changed command line syntax to work correctly when input image is changed.
Existing scripts may be affected if border units were not set to pixels.

7-Dec-2018

Scratch Removal transformation: fixed problem with workflows stopping at this transformation if no scratches were specified.

File Open transformation

Incorporated the Batch transformation into the File Open transformation. This solves the problem of converting a File Open to a Batch transformation when you want to convert a normal to a batch workflow. Opening multiple files now creates a file list instead of opening multiple top-level images. If you want to switch files, double-click on the transformation to bring up the list and select a different file from the list or load one or more new files into the list.

Added a trash icon to the tool bar to let you remove the current file from the list.

If the file list is empty when the transformation dialog starts up, it immediately asks for files.

Fixed error reporting for files that do not exist.

Dropping files on the File Open dialog box appends their pathnames to the file list.

Running a batch operation now only recalculates images that depend on the File Open transformation.

Display transformation: renamed to Slide Show, added size setting. Slide show is now delayed until all the images have been processed – this lets it run uninterrupted once it starts.

File Export command: fixed problem of transformation not being removed when command completes. Added option to export as Original file type – this also requires a Default File Type setting in case there is no original file type (e.g. if the original image was pasted from the clipboard).

Implemented Print transformation for batch printing. There is still a Print command.

Fixed problem with last file open folder sometimes getting lost.

Fixed problem allowing various windows to be closed while the Windows File Open or File Save dialogs were active, thus causing a crash.

Removed File/Rename command

Added Edit/Full Screen command to display the current image full-screen (Ctrl-F shortcut). Click or press a key to return to normal display.

30-Nov-2018

Added a new group of transformations under the Transformation/File submenu. Taken together, these transformations provide a batch processing facility. The Batch transformation provides a list of files to operate on and manages their sequential loading and recalculation. The Export transformation exports its input image when running in batch mode. Similarly, for the Print and Display transformations (Print is not yet implemented). You will need to download the full installer to get new bitmaps. The updated help file describes the new transformations.

Added new Edit commands for full screen display (Ctrl-F shortcut) and setting and clearing batch breakpoints (breakpoints are not implemented yet).

File Export: fixed problems with JPEG Quality slider not being updated in some cases and several other problems with saved settings. Added some new export options as well in preparation for batch operations (see above).

Linear Blur: fixed problem with blur at angles other than multiples of 90 degrees had a dark border.

Image menus now close automatically if there is no mouse activity in the menu for 4 seconds or if you press the Esc key.

Drop Shadow transformation: fixed problem causing transformation to think there was an error when everything was OK in some cases.

25-Nov-2018

Plug-ins: added support for DxO FilmPack.

Linear Blur transformation: fixed problem with masks.

Removed Help menu item to toggle CUDA. Added an item in the File/Preferences dialog box to turn CUDA off if it is causing problems.

24-Nov-2018

File Export: fixed problem with JPEG Quality slider not working. Added New Folder button to the folder selection dialog box.

Added new Linear Blur transformation that blurs an image in a single direction. See the updated help file for details.

Compass control: holding down the shift key while selecting an angle snaps to exact multiples of 15 degrees. Increased the resolution of the compass control from 1 part in 4096 to 1 part in 10000. Added description of compass control to help file.

22-Nov-2018

Fixed problem with selecting from image menus by clicking on image browser thumbnails.

Image menus are now sorted in descending order of image number. This places the most recently created images at the top.

Added new File Export command to facilitate saving images for the web or email attachments. It automates selecting the output folder, resizing the image, performing post-resampling sharpening, converting to 8-bit, converting to sRGB, and saving the file. See the help file for details.

Mask: saved mask commands now only record up to the current operation – any operations that were performed and then later undone are now ignored, effectively truncating the undo stack at the current operation. This fixes some bugs in mask when restoring saved mask commands.

20-Nov-2018

When selecting images via an image menu, you can now select by clicking an image thumbnail in the image browser, but only while the image menu is open. If you click on an image thumbnail not in the image menu, PWP beeps and the selection is ignored.

Mask: fixed crash loading scripts including masks that used the mask paint tool.

Mask: fixed problem with mask not being erased on Reset from Amount control in some cases.

The hourglass cursor is now displayed while saving JPEG or TIFF files.

17-Nov-2018

Fixed problem of File/White Screen not suppressing image browser window.

9-Nov-2018

Reduced flashing on startup.

8-Nov-2018

Mask: fixed problem with paint tool threshold not being saved correctly and fixed bug causing crash when rebuilding masks for editing in some cases.

6-Nov-2018

Composite: fixed problem with changing the number of alignment points when editing a transformation.

4.5-Nov-2018

Mask dialog: fixed problems with mask undo and Feather and other tools.

Mask dialog: fixed problem with save mask as image if file did not previously exist.

4-Nov-2018

Masks transformation: fixed problem making it impossible to select a starting image as a mask.

Mask dialog: added error messages when saving the current mask as an image file if the file already exists or is currently open.

3-Nov-2018

Further optimizations to Mask Paint tool.

Fixed problem with color management settings in script file headers when profiles are set to None.

2-Nov-2018

Fixed a minor problem with script file headers, and they now store filenames instead of full pathnames for color management settings. Old script files still work OK.

Added a setting in File Preferences to smooth the preview display in the main image area when images are zoomed in or out.

1-Nov-2018

Fixed problem with Mask Undo state being lost when the Mask dialog box was closed. To get this to work correctly, the Redo list is now cleared when you close the mask dialog box.

Fixed problem of brush display not being updated when using the mouse scroll wheel in Clone, Paint and Smudge tools.

Fixed problems with Smudge tool brush.

Fixed problems with Monitor Curves settings not being restored correctly when loading script files.

31-Oct-2018

Improved display update quality when applying tools such as clone, paint and smudge.

Fixed problems with certain ICC profiles that have invalid description fields. This was showing up when opening files with embedded profiles.

Reworked Mask Paint Tool to speed it up and update mask overlay while painting.

29-Oct-2018

Magnifier Mode: fixed minor issues and optimized code.

Mirror-Rotate: fixed problem with 48-bit color images.

Fixed problem of vertical stripe not being erased between split screen images in main display.

28-Oct-2018

Speeded up image rotation/reflection code.

Speeded up luminance-only sharpening in Bilateral Sharpen and Unsharp Mask. Fixed problem with 48-bit color images.

Fixed some problems in magnifier mode.

27-Oct-2018

Rewrote code that zooms images in and out for display – should result in faster, sharper downsized images. Eliminated main window flashing when zooming.

Fixed some problems with minimizing dialog boxes on multiple monitor systems.

Fixed problems with failure to minimize or crash on minimizing certain transformation dialog boxes, including Levels and Color.

21-Oct-2018

Color picker: set the minimum color picker size to guarantee all RGB values can be selected.

Added new Repeat transformation under Special Effects. See updated help file for details.

19-Oct-2018

Median Blur: fixed problem with variable blur and amount slider less than 100%.

Conditional Curve: fixed problem with curves being overly sensitive to changes. Added a Strength slider to let you vary how sensitive the curve is. To make subtle adjustments more easily, reduce Strength to below 100%. This change will affect existing scripts as the old curves will no longer have the same effect.

Stack Images: fixed problem with lots of unnecessary calculations being done.

11-Oct-2018

File/White Screen: fixed some minor problems.

Texture: More speedup using CUDA, fixed some minor bugs, and moved some settings from the Settings Menu to buttons on the top line of the dialog box. A full install is necessary to get an additional required DLL for generating sets of random numbers with CUDA.

Bilateral Sharpen: speedup using CUDA. This also speeds up some other transformations that also incorporate bilateral sharpening such as Adjust and Brightness Curve (advanced option).

8-Oct-2018

Remove Purple Fringe: changed caption to Purple Fringe to match Quick Pick.

Adjust and Color Curves: Switching between HSV and HSL no longer resets curves. Switching from HSV or HSL to RGB sets all 3 curves to the V or L curve. Switching from RGB to HSV or HSL resets the H and S curves and sets the V or L curve to the B curve.

Conditional Curves: Switching color space or channels no longer resets the curve.

7-Oct-2018

When activating the Mask dialog: If the display is split screen or the input image is being displayed, the display is not zoomed to fit or switched to split screen. If only the output image is being displayed, the display is reset to split screen and zoomed to fit.

Modified program to begin working with CUDA (using graphics card to accelerate the program). Under Help/About Picture Window Pro, there is now a line at the bottom of the About box that tells you if CUDA is available on your computer or not.

Speeded up Texture transformation using CUDA to compute FFT and performing some other operations in parallel. You will need to do a full install the get the required DLL.

6-Oct-2018

Multipoint Gradient: added Method control with several alternative interpolation methods.

Advanced Sharpen: fixed problems with preview not updating correctly when mask was changed or sliders were moved.

Mask: fixed problem with transformation dialog display controls not being updated when the Mask dialog sets split screen display.

5-Oct-2018

Added a section on Workflow Suggestions in the Help file under General Tips.

Magnifier: fixed problems with grayscale profiles being ignored.

Add new Transformation/Sharpen/High Pass transformation as described in the updated help file.

4-Oct-2018

Monochrome: fixed problem of 8/16 bit selector not triggering a preview.

Magnifier tool: fixed problems with images other than color.

3-Oct-2018

Bilateral Sharpen: added Sharpen Luminance Only option to Settings Menu.

Increased stack size for Mask Flood Fill tool to avoid overflow with complex regions in large images.

2-Oct-2018

Added File/21-Step Gray Calibration command. See updated help file for more information.

30-Sep-2018

Fixed problem with File Open not starting in the last folder opened.

Added File/Preference setting to let you customize the time delay between when you stop typing and when the program responds (normally 2 seconds). If you are a slow typist, you can increase the delay, but if you are impatient you can shorten it.

Fixed problem where closing an image via the image browser while its dialog box was open closed the dialog box but not the image. This involves undoing a change I made a while ago, but I don't remember why I made the original change, so some other problem related to closing or canceling transformation dialog boxes may reappear.

Fixed problem with the Windows modal dialog boxes not de-activating the transformation dialog, mask dialog, color pickers or other popup windows, possibly causing a crash.

29-Sep-2018

Mask: Added two commands to the Settings menu: "Save current mask" and "Combine saved mask". Save current mask stores a copy of the current mask image internally. Combine saved mask combines the saved mask with the current mask, according to the current mask mode (Add/Subtract/Overlap/Invert). This feature takes the place of the mask combine tool in PWP 7.20 without introducing adding any dependencies on other images that would be very complicated to keep track of.

Levels and Color: fixed problem with error on startup in some cases.

28.5-Sep-2018

Magnifier: Added buttons to Magnifier dialog box to allow viewing input image, output image, or both side by side.

Plug-ins Setup: fixed problem with plug-ins not being recognized until PWP was closed and re-opened.

28-Sep-2018

Spiral: fixed problem with 16-bit black and white images.

Mask: added rulers under color bars in mask range tool.

26-Sep-2018

Fixed problem with adjusting separator between image browser and main image area causing crash in some cases and not zooming to fit correctly in some cases.

Layout: fixed problem with input image disappearing when clicking the Preview button.

Added support for two Topaz plug-ins: DeNoise 6 and ReMask 5. Changed the File menu to accommodate multiple plug-in sets. Individual plug-ins are now grayed out in the menu if

unavailable. To get the Set Folder bitmap for File/Plug-ins/Setup you will need to do a full install.

25-Sep-2018

Added support for Nik plug-ins. (see for more information). New command is File/Nik plug-ins – see help file for details.

Added optional ruler to color line control.

24-Sep-2018

Posterize: Autopalette and Refine Palette now close all open color pickers.

Fixed problem restoring saved settings for Amount controls with no mask but with values < 100%.

Mask: fixed problems with HSV H and HSV L in mask curves tool.

Curve Display: center horizontal and vertical lines of grid are now double width.

Color Curves: fixed a number of problems with RGB All mode

Extensive internal rewrite to eliminate fixed limits on the length of command lines and the number of settings they can contain. It is likely that I made a few typing mistakes, so be on the lookout especially for errors regarding illegal settings or command lines.

22-Sep-2018

Paint, Clone and Smudge Tools: fixed problems with undo/redo.

Layout: fixed problem of transparent panels when deleting panels and then adding new ones.

Layout: switching panel orientation no longer resets the cropping rectangle – it just rotates it, if necessary.

20-Sep-2018

Layout: fixed problem of snap and display grid not being restored when loading default settings and other problems with images too large to fit in layout.

Layout: fixed problem with Panel size matches image dimensions setting – final image did not match preview.

Layout: renamed the various panel options for more clarity and updated the help file. Added two new options: Fit to panel – scale to image dimensions and Fit to panel – scale 1:1. When these options are selected, the image is scaled accordingly and then cropped to fit the panel size.

Bilateral Sharpen: fixed problem with amount mask not being restored after loading settings file.

18-Sep-2018

Mask: added warning message when attempting to save mask settings if the current mask was built starting from another image, since the information to rebuild the initial mask image could in turn depend of a number of other images. Saving the current image as a script file is the only way to avoid this problem as it saves all the images necessary to rebuild the current image.

All transformations that use masks: when saving settings files, mask settings are now included. Masks are restored when you reload the settings file. If the mask was built starting with another image, that image is not restored, and a warning to that effect is issued when saving the settings. Similarly, auxiliary inputs are not saved in settings files and a warning is also issued if they are present. Again, scripts or workspace scripts are the way to go if you need to save dependencies on other images. Bear in mind that a mask created for one image may not work for another image, depending on which tools you used to create the mask.

Composite: fixed problem with Reset not clearing the overlay image.

High Contrast: fixed problem with Threshold mask.

15-Sep-2018

Fixed problems with File Open commands not starting at the correct folder.

Layout: When creating new panels (except for the first one), the new panel is placed just to the right of the current panel if there is room, otherwise it is placed below the current panel at the left edge of the layout image if there is room, otherwise it is placed at the top left corner of the layout image. This lets you easily place multiple panels on a grid as you add them. The first panel is placed in the upper left corner.

Layout: fixed problem of background scale slider and readout not retaining their correct values.

Layout: fixed problem of initial output image being undefined.

Layout: fixed various problems with images too big for layout.

Layout: selecting a panel sets the corresponding image, if any, as the current input. This feature was previously disabled for performance reasons, but leads to confusion if omitted.

13-Sep-2018

Gaussian Blur: added Blur Chrominance Only to Settings menu, also fixed minor bug in blur algorithm.

Unsharp Mask: added Sharpen Luminance Only to Settings menu.

Monochrome: fixed problem with reloading saved settings.

Added File/Save to Default, File/Open from Default, File/Set Default Folder commands. These were added as a convenience if there is a folder you frequently want to load from or save to.

File/Save commands: added warning if image is open for editing with option to close transformation dialog box and continue.

11-Sep-2018

Clone Side Branch: fixed problem cloning transformations with unused masks for auxiliary inputs (e.g. Composite).

Restored Curve/Histogram display to curves such as Hue that are zero-centered. The double histogram display is mostly useful for seeing the output histogram and less so for adjusting control points.

Conditional Curve: fixed a few problems.

Layout: added Preview button just above preview area in dialog box.

Frame: added Bypass and Split Screen buttons and Preview button.

10-Sep-2018

Composite: fixed problem of display changing when an overlay image is selected.

Monitor/Printer Curves dialog box is now modal. This prevents various script errors if you save a script while the dialog box is open. Returned Monitor/Printer curves from Color Management dialog box to File Menu.

Warp: fixed problem of adjusting Proportions slider not updating output image if original control points left unchanged.

Color Curves: fixed problem with wrong curve display in some cases when switching color spaces.

Finished work on Conditional Curve transformation. See updated help file for details.

9-Sep-2018

The Confirm Profile Conversion dialog box that pops up when you open files now has Convert and Don't Convert buttons instead of OK and a menu selection to convert or not. Removed some error messages on Cancel.

Fixed problem of mask dialogs not being closed when loading settings. This may or may not solve other recently reported mask issues.

I discovered bugs in Paint, Smudge and Clone in the Undo/Redo feature that I inadvertently introduced when I optimized their memory usage 12-Aug. Will address in a future update. Undo generally works OK if never do a Redo, and Undo may not work after you re-open the tool dialog for editing.

Work in progress on new Color/Conditional Curve transformation (see updated Help for details) – do not use this yet, it is not working although the user interface is more or less done.

8-Sep-2018

Added Smudge Tool, similar to the one in PWP 7.20. Details in the updated help file.

7-Sep-2018

Added Levels and Color transformation, similar to the one in PWP 7.20. Details in the updated help file.

5.5-Sep-2018

Stack Images: fixed problem with initial curve display as Histograms.

Median Blur: applying variable median blur to 16-bit black and white or 48-bit color results in 8-bit black and white or 24-bit color image.

5-Sep-2018

Color Wheel: fixed problem loading save colorwheel settings files.

4-Sep-2018

Fixed problem with Initial Curve Settings in File/Preferences causing the Display Histograms option to be ignored.

Adjust: fixed problem with black and white images.

3-Sep-2018

Mask: Added Load... and Save... buttons to Linear and Oval Gradient mask tools. This lets you save gradients and reload them later. The coordinates of the gradient are scaled to the width and height of the input image.

2.5-Sep-2018

Mask: modified Undo for Rectangle, Oval, Polygon, Spline, and Gradient mask tools to let you edit the locations of control points and re-apply the tool. When you click Undo after an Apply for these mask tools, instead of undoing the entire operation in one step, it happens in two steps. The first Undo reverses the Apply and the second Undo reverses the mask operation.

2-Sep-2018

Selective Color Correction: fixed problem with output not being updated after loading a settings file.

Layout: fixed problem of background image not being cleared on Reset. Reduced flashing, in part by not automatically making the image associated with the current panel be selected as the current input which caused the main image area to be refreshed with a view of that input image. To edit the cropping for an input image, you must now select it manually by clicking on its half-size thumbnail in the image browser. If there is no default settings file, layout units are set to match the default units from File/Preferences and snap grid and display grid are set to round numbers in those units (for cm or mm, 0.5 cm and 2.0 cm – for pixels or inches, 0.25 in and 1.0 in).

1-Sep-2018

Added default curve options to File/Preferences. These options let you set the default initial curve display options for all transformations, including curve/histogram display, histogram expansion, grid divisions and probe size.

Added graying of submenus in the Transformation menu based on image type.

31-Aug-2018

Median Blur: added Variable method with slider to adjust median radius. Variable median is a fast, close approximation to the precise median.

Adjust: in the Curve tab with Color Space set to RGB, added an All channel option in addition to R, G, B. This displays a combined RGB histogram and applies the same curve to all three channels, same as Brightness Curve does in RGB mode.

Color Curves: same as above, added new All option to RGB color space.

30-Aug-2018

Autorange: fixed bug for 16-bit images.

Relaxed syntax checking to allow defaulting of missing command arguments and provide a warning on version mismatch.

Fixed various transformation's problems related to loading settings files.

Moire: fixed problems with shadow tint.

Change Profile: fixed problems when changing input image between color and black and white or vice versa.

Quick Pick: Fixed problems causing Add Border button not to be clickable.

Fixed problem with Clone Top Level Image command.

Fixed problem causing Stack Images to crash on Cancel.

28-Aug-2018

Equalize: Fixed problems with initial curve display and for 16-bit image curve display.

Adjust: Added RGB as a color space option for the Curves tab. Switching color spaces now resets curves. Added separate color space control to the Color tab for adjusting saturation, although the difference between HSV and HSL saturation adjustment is subtle. Fixed bug with adjust saturation of 48-bit color images in HSV color space.

Added Redeye Removal Tool, similar to the one in PWP 7.2 but that operates more or less like Speck Removal. See updated help file if you need more information.

27-Aug-2018

Equalize: Fixed bugs in the way equalization was being performed. Also added a second curve and histogram display to show the curve that Equalize is applying to the image, with the histogram of the output image in the background.

Fixed problem causing zoom factor in title bar for left side of split screen not to update correctly.

Improved speed of copying images as well as other internal routines shared by various transformations and commands.

26-Aug-2018

Internal updates to Match Reference.

Improved speed of Color Wheel transformation.

Improved speed of Mask Gradient tools.

Improved speed of common code used by transformations that have their own 1:1 preview area.

Reworked Image Info to display the time and date the original image was created as well as the time and date it was saved, if any. In scripts, this time and date reflects when the file was last saved when the script file was written, and it is restored when the script is reloaded. If the saved file was modified after the script was saved, the last modified date of the file will postdate the last saved date in the script file. This time and date feature will only be active on new scripts, since existing scripts do not have the time and date recorded within them.

24-Aug-2018

After Copy/Move, only the affected images are now recalculated.

Fixed problems in a number of transformations with clicking OK or Apply not picking up the latest value after integer controls were updated but before the time delay had elapsed.

23-Aug-2018

Removed the Edit menu commands for Set Destination, Clear Destination, Copy Image to Destination and Move Image to Destination – these commands did not work because after setting a destination since clicking on the source image deselects the destination. These commands are now available only through the right-click context menu or via the mouse shortcuts. Added Set as Destination to the branch context menu since branches are legal destinations.

Fixed problem in Resize – was not hiding units control in Set Pixel Width and Height mode.

Gradient – Linear, Oval and Sweep – fixed problem with Fill mode and amount slider > 0 and < 100 .

During recalculation, the thumbnail in the image browser for the image currently being recalculated is now displayed with a cyan title bar background, so you can watch the recalculation progress through the affected images.

Fixed problems with incomplete recalculation after copy/move – still working to optimize so only the necessary images are recalculated after copy/move.

22-Aug-2018

System locale settings for decimal point, thousands separator and argument separator are now used in the user interface both for display and data entry purposes. Commands and other information stored in files remain in US notation to maintain a standard format for file exchange across locales. Added a new Internationalization topic to the help file.

Color Curves: fixed problem when starting up on an empty branch.

21-Aug-2018

Color Balance: Fixed problems with Custom white balance not being set when it should be.

Fixed problem of Cancel button not propagating changes if an Apply has been previously performed.

Added two new Edit commands that operate only on top-level images: Clone Top Level Image and Clone Top Level Branch. Clone Top Level Image creates a new top-level image with the same transformation and settings as the current image. Clone Top Level Branch creates a new top-level branch that is a copy of the current one. These commands can be accessed either through the main menu or the right-click on a thumbnail popup menu in the image browser.

20-Aug-2018

Fixed problems with how jpeg and tiff settings are derived from defaults.

Autorange: fixed bug in the way it saved its command – auto-preview and synchronized scrolling were swapped.

Resize and Watercolor: fixed problems with clicking buttons before time delay after text entry has expired.

Advanced Sharpen, Watercolor: fixed problem with scrolling preview area by click and drag.

18-Aug-2018

Masks that are reset are no longer included in script files.

Fixed bugs in Copy & Move causing incorrect recalc after operation.

Posterize – color pickers are now closed after a reset or when loading settings.

Added new Bypass transformation that simply passes its input through to its output. See the updated help file for an example of when it can be useful.

When saving JPEG or TIFF files, options are grayed out if they have no effect. For example, if there is no GPS data, the GPS option is grayed out.

17-Aug-2018

Watercolor: Fixed display mode problems.

Autorange: Fixed several problems with color space setting.

Image Info: If an image has been saved since it was opened, the filename and folder it was saved in is now displayed in addition to the filename and folder of the file from which it was derived.

Fixed bugs related to saving or restoring file information from a File Open when loading and saving scripts.

Fixed problem allowing two Image Info dialog boxes to be open at the same time if the image browser is in a separate window.

Fixed problems with determining downstream dependencies of side branches. Closing a side branch now closes all dependent images, including those that reference images in the side branch as auxiliary inputs.

16-Aug-2018

Fixed problems with transformation Reset not resetting amount masks.

Fixed bug in transformation shutdown code that may be responsible for crashes when closing transformation dialog boxes.

15.5-Aug-2018

Watercolor: Added standard buttons and Compute Entire Output Image button.

Fixed problem causing horizontal scroll bar to show up incorrectly sometimes when switching between synchronized and unsynchronized scrolling.

Fixed problems with File Save As and File Save Back with regard to the initial folder proposed in the File Save dialog box.

Fix bugs causing crash when displaying blank images (as in Stack Images). Fix crash on transformation shutdown in some cases.

15-Aug-2018

Masks Transformation: Fixed bug causing output image not to be passed through from input image.

Mask Dialog: Fixed bug causing problems when starting a new mask from a pre-existing mask or image.

Image Info: Fixed problem with initial dialog size too small.

14.5-Aug-2018

Advanced Sharpen: fixed problems with preview image after clicking Compute Entire Output Image button.

Fixed problem of synchronized scrolling button not being displayed/hidden when switching display modes in Advanced Sharpen, Bilateral Sharpen, Unsharp Mask, Gaussian Blur and Precise Gaussian Blur.

Fixed problem of flashing scroll bars when adjusting the position of the separator bar between the image browser and the main image area.

14-Aug-2018

Dialog boxes displayed next to the image browser (e.g. close dialog box when clicking the x icon on an image in the browser) are now displayed centered on the main monitor if the image browser is in a separate window.

Fixed Mask bug causing incorrect operation after applying the Range tool in some cases.

The Compute Entire Output Image button (the one just above the 100% preview area in the dialog box) in Advanced Sharpen, Bilateral Sharpen, Unsharp Mask, Gaussian Blur and Precise Gaussian Blur no longer does a zoom to fit.

Fixed bug in Brightness Curve, Advanced Mode, when turning on Antialias in some cases.

13-Aug-2018

Fixed bug causing crash in Quick Pick.

Added two new Mask tools: Remove Pinholes and Median Filter – see updated help file for details. Remove Pinholes is similar to the Speck Removal phase of Advanced Sharpen – it fills in small white and/or black specks in the current mask. This helps automate cleaning up holes in masks left behind by other tools such as Range or Flood Fill. Median Filter does what the name implies – while it also removes small specks, it also rounds off pointed corners, making the boundaries between black and white smooth curves. This can be a useful precursor to the Blur tool for creating dodge and burn masks.

Full install required to get the new bitmap for the Median Mask tool and the updated help file.

12-Aug-2018

Paint and Clone Tools: implemented more efficient undo that, for each stroke, only saves the areas you paint or clone, not the entire image.

Quick Pick: fixed memory leak.

Color Balance: Moved Full Range from Settings Menu to the White control. Fixed problems of auto white balance not being recomputed when switching input images and other related problems.

Multi Color Balance: Fixed problems with colors changing on Reset and not being set correctly in some other cases.

11-Aug-2018

Multi Color Balance: fixed problem with auto white/black settings not being re-applied to new images. Also fixed problem with Clear Default Settings.

10-Aug-2018

Fixed crashing when closing transformations whose dialog boxes were open, when the close resulted from closing an image on which the transformation depended. This failed depending on whether the transformation dialog was opened for the first time or re-opened to edit an existing transformation.

Halftone: fixed problem causing custom image control not to be initially hidden if the screen was not set to Custom.

Posterize: fixed progress indicator and removed unnecessary recalculations in Refine Palette.

9.5-Aug-2018

Added making the standard Windows sound under various error conditions. Added Silent setting in File/Preferences so you can suppress the sounds if you find them annoying or do not want to disturb others nearby.

Added warning in copy/move if destination image type is incompatible with current transformation. For example, trying to copy or move Color Balance to a black and white destination image.

When closing an empty side branch, the confirmation no longer refers to closing any dependent images.

Fix bug causing transformations with open dialogs not to be closed in some cases.

9-Aug-2018

Halftone transformation: fixed problems with custom image selection – custom image control is now hidden unless Custom is selected. Fixed bug causing scripts containing Halftone transformations to crash.

Posterize – fixed bugs in Refine Palette.

8-Aug-2018

Halftone transformation: fixed problems with custom image selection.

Fixed vertical spacing problems in Image Browser.

Fixed internal error when dragging the separator between the image browser and the main image area when there was a splitter in use.

Minor changes to Checkerboard transformation (renamed Patch Width to Cell Size and increase the upper limit on number of columns and rows from 256 to 1000)

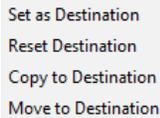
Added copy and move feature to image browser to let you quickly move transformations around in the image tree. From the help file:

Copy and Move

A more powerful way to rearrange the image tree is with the copy and move feature. To copy or move a transformation from one place in the image tree to another, you first select the destination transformation which is the one after which copied or moved transformations will be inserted. Next you either move or copy transformations one at a time. After copying or moving a transformation to the destination, it becomes the new destination so images accumulate in the destination branch in the order you transfer them. Currently, there are some limitations to copy and move -- you can only use it on transformations, not splitters or side-branches, and also you cannot use it to copy or move top-level images.

There are three ways to issue the commands to select a destination and copy or move transformations:

Via the Edit menu



Set as Destination
Reset Destination
Copy to Destination
Move to Destination

*To mark a transformation as the copy/move destination, first click on the image and then select **Edit/Set As Destination**. The destination image is displayed with a yellow background for its title bar in the image browser.*

*To clear the destination, either select **Edit/Reset Destination** or select **Edit/Set As Destination** a second time on the same image.*

*To insert a copy of a transformation just after the current destination, first click on it to select it and then select **Edit/Copy to Destination**.*

*To move a transformation, select it and then select **Edit/Move to Destination**. Move is just like copy except the original transformation is closed after copying it.*

Via the right-click context menu

*The same four menu commands described above are also available for a transformation by **right-clicking** on it in the image browser which displays a pop-up menu. This method automatically selects the transformation before presenting the menu so it saves a click.*

Via the Mouse

This method is by far the most convenient, once you get the hang of it.

*To mark the destination, **ctrl-shift-click** on it in the image browser. To clear the destination, **ctrl-shift-click** on it second time or **click** on any transformation.*

*To copy a transformation to just after the destination, **shift-click** it.*

*To move a transformation to just after the destination, **ctrl-click** it.*

7-Aug-2018

Fixed problem in Mask Gradient tools causing color line control not to be restored when editing an existing mask.

Removed the minimize icon from the image browser title bar when it is displayed as a separate window. To hide the image browser, just close it which automatically reverts to "Show image only" display. To get the image browser window back, click the "Show image browser in a separate window" button.

6-Aug-2018

Advanced Sharpen, Bilateral Sharpen, Gaussian Blur, Unsharp Mask and Precise Gaussian Blur: all now have a new Preview button just above the 1:1 preview area in their dialog boxes. Clicking this preview button recomputes and updates the full output image, but the results are not propagated to other downstream transformations. Previously, the only way to recompute the output image was with the Apply button which does propagate changes downstream and can therefore be very slow.

Fixed drag and drop problems.

5.5-Aug-2018

Fixed Quick Pick not working when image browser is in a separate window and selected.

Fixed problem of mask and other windows sometimes going off-screen when main window is maximized.

Fixed problems removing splitters with a single branch after loading script files.

5-Aug-2018

Added palette bar to the selective color correction control and transformation. This lets you create a new control point by clicking on a palette color, thus providing a mechanism to select colors from other images or from a pre-defined palette.

Adjust transformation: changed method of adding or removing color casts to match the way Color Balance works.

Fixed problem in Quick Pick not matching last character of command name.

Removed unnecessary recalculation of downstream images when closing a transformation that has just been inserted in a branch.

Fixed several transformations that were closing their dialog box after an Apply instead of keeping it open.

Made the thumbnails in the Rotate-Mirror transformation somewhat larger.

Fixed bugs in Mask when input image was zoomed or scrolled differently from the output image.

Added synchronized scrolling control to Advanced Sharpen, Bilateral Sharpen, Gaussian Blur, Unsharp Mask, Precise Gaussian Blur and fixed problem where display toolbar was getting out of sync with split screen when Mask was invoked.

4-Aug-2018

Added code to force main window and image browser window on-screen if they are not fully visible. The main window is forced on-screen on startup after restoring its previous location, so restarting Picture Window will restore the main window's visibility. The image browser window is forced on-screen any time you switch to separate window display, so switching display modes will restore the image browser's visibility and will also re-create it if you close the image browser window.

Fixed some minor problems in the code that ensures that the current image is always visible in the image browser window by scrolling it into view if necessary.

Fixed problem with Quick Pick not giving initial focus to its edit control.

3-Aug-2018

Added a new Palette mode (new button next to Histogram Mode button in main tool bar). You can set up to 11 custom colors in the palette. You can use it like the Readout Mode to select colors from the current image or you can click on the colors to bring up a color picker and select the colors directly. User-defined palette colors are available to the color picker as the bottom half of the 11 built-in palette color bars. Using the Palette dialog settings menu you can reset the palette colors to the same as the built-in palette or load or save a set of palette colors in a named file. This makes it possible to select colors from an image other than the current image via the palette. It also lets you create and select, for example, palettes of skin tones, sky colors, custom warming or cooling filters, a set of grays, etc.

Fixed problem with Quick Pick after the first character is typed (unless it is the space bar). Typing Esc or Return now exits Quick Pick.

Fixed several problems with image browser display and scroll bars.

2-Aug-2018

Equalize transformation curve now works with a probe to display curve markers or insert new curve points.

Monochrome transformation: fixed problems causing coarse curve histogram display.

Fixed problem causing image browser not to refresh when clicking on a new image.

Fixed problem causing main image area to display incorrectly in split screen in some cases.

File Save: reduced the number of clicks necessary to select overwrite or rename when saving with the same name as an existing file.

1-Aug-2018

Changed Quick Pick name matching rules – first characters must match, subsequent characters must match in sequence somewhere in the command name. For example: "cc" matches "Checkerboard", "Color Balance", "Color Chart", "Color Curves" and "Combine Channels" but "cch" only matches "Color Chart" and "Combine Channels".

Added the ability to move image browser to a separate window – especially useful if you have multiple monitors and want to move the browser to the other screen. This is done via a 4th button on the display tool bar at the top of the screen. The Ctrl-D keyboard shortcut does not cycle through this option.

31-Jul-2018

Color wheels in color picker and selective color correction now converted to monitor color space for display.

Fixed problem in Adjust transformation causing internal error in some cases.

30.5-Jul-2018

Posterize: added probe – clicking on the input image appends a color from the input image to the palette.

Mask: Fixed problem with Load Settings causing a crash in some cases.

30-Jul-2018

Made Tool menu a submenu of Transformation.

Added an icon on the main tool bar for Close All Images.

Added keyboard shortcut: Ctrl-D to cycle between image browser only, main image area only or both.

Fixed problems with various transformation probes not being restored when clicking the title bar.

29-Jul-2018

Switching to a new window now refreshes the image area scroll bars.

Added "Quick Pick" method of selecting transformations and tools. Type a letter and a set of buttons is displayed for the transformations and tools that start with that letter, grayed if the command is inactive. Typing a space instead of a letter displays all available commands. Subsequent letters you type match anywhere in the name until there is an exact match or only one ungrayed match left. Or click any un-grayed button to select the command. Quick Pick is described in more detail in the help file under General Tips.

Posterize: fixed problem causing color controls not to be updated on Refine Palette.

28-Jul-2018

Adjust transformation: Fixed problem with Reset not updating color line or select color correction display. Removed unnecessary image recalculation on mode change. Fixed crash when resetting color line in some cases. Added Reset to color cast control. Fixed problems with channel and histograms not being updated correctly when changing color space in Curve mode.

After loading scripts, any splitters with less than two branches are now removed.

27-Jul-2018

Adjust transformation: Fixed some problems with probes not being activated. Probes now pick colors from results of the previous operation and not from input image. Mode selection is now done using tabs at the bottom of the dialog box. Where the mode selection tool bar used to be is now a mode enable tool bar that lets you temporarily enable or disable any of the operations, so you can see its effect on the final image. Removed probe size settings from settings menu as these are controlled by the individual mode settings. Fixed problem of curve color channel control not being hidden in other modes. Fixed problems with Show Histogram of Masked Area Only button.

File Paste: Double clicking on a pasted image now displays a dialog box similar to the one for File Open, letting you cancel, paste over the existing image or paste into a new top-level image and clone the existing branch. However, unless you place a new image on the clipboard, you will just get a duplicate of the existing image.

26-Jul-2018

Adjust – reduced the area you can click on to set the color balance color or selective color correction control points.

Changed layout of Selective Color Correction dialog box and made color wheel grow to fill available space as dialog is resized. Made color wheel background dark gray for Selective Color Correction and Adjust transformations to indicate the active area where you can click.

Copy transformation: fixed problem with input image menu.

Dragging the separator between the image browser and main image area now zooms to fit all images in the workspace.

Fixed bug in image browser causing connector lines between splitters and their branches to be drawn incorrectly if the image browser was scrolled to the right.

25-Jul-2018

Color Balance transformation – fixed problem with initial curve size.

Removed Edit tool – replaced by an improved Adjust transformation.

Reworked Adjust transformation completely – see updated help file for information.

23-Jul-2018

Increased limits on command line length and number of arguments.

Fixed problems in Frame and Watercolor transformations not acting on text input changes if OK or Apply was clicked before the time delay was activated.

Fixed problems with overlapping controls in Mask dialog.

Fixed several problems with Move Image Up and Move Image Down.

Fixed problem in Bilateral Sharpen causing crash in some cases if the transformation dialog box was open and an upstream image was modified.

21-Jul-2018

Halftone transformation now assigns the color or gray working color space to its output image.

Posterize transformation: added new Refine Palette button that makes incremental improvements to the current palette using k-means clustering – see help file for details.

Holding down the Shift key while Picture Window is starting up now bypasses automatic reloading of the workspace file from the previous session.

Fixed bug in Clone tool for Fixed cursor linkage.

20-Jul-2018

Color Negative transformation: fixed problem causing incorrect initial green and blue gamma slider settings.

19-Jul-2018

Crop, Fan and Warp transformations: fixed problem of left side of split screen being zoomed to fit after any change to the cropping rectangle or other settings.

Fixed several bugs related to split screen zooming and scrolling.

14-Jul-2018

Color Wheel test pattern: you can now set the image width, background color and output bit depth. Also improved smoothness of edges and interior.

Posterize: added a Reset All command to the Settings Menu and updated the help file.

13-Jul-2018

Stereo transformation: added Left Only and Right Only Method options. Changed Swap Images from a button to a check box. Help file updated with details.

Fixed problems with the Advanced Sharpen probes – see updated help file for details.

Fixed problem with Precise Gaussian Threshold slider.

Fixed problem causing preview in Precise Gaussian not to refresh if Amount was zero.

Fixed bug in Wave transformation causing tile settings to be set incorrectly when transformation starts up.

Eliminated unnecessary image recalculations when transformation dialogs start up when opening transformation for editing.

Eliminated unnecessary image recalculations on OK or Apply for transformations with their own preview areas. Still some issues with Clone and Paint tools.

11-Jul-2018

Loading a new color line now closes all the color pickers from the previous color line.

Fixed bug causing color curves (.cc files) to save the wrong number of control points for the third channel.

10.5-Jul-2018

Zooming in now zooms in on the center of whatever was displayed in the image area previously. If the entire image was visible, it zooms in on the center of the image. If only part of the image was visible, it zooms in on the center of the part that is visible so as to keep the scroll bars in the same location. Similarly with zooming out.

Crop transformation – now does a Zoom to Fit after an Apply.

10-Jul-2018

Fixed more problems with closing images whose transformation dialogs are open for editing.

Fixed problem in Precise Gaussian – Apply was mistakenly causing the transformation dialog to shut down.

Crop Transformation – renamed Custom Width/Height to Custom Proportions.

9-Jul-2018

Fixed memory leak in Clone Side Branch command.

Fixed crashes in some cases introduced in 8-Jul-2018 version when closing images with an open transformation dialog box.

Crop transformation: fixed various problems related to custom proportions and applying settings to different input images. If applying crop settings to a new input image whose size is different from the original and whose proportions are not arbitrary, the cropping rectangle is made as large as possible, while preserving the proportions. If the image size is the same, the cropping rectangle is preserved. If the proportions are arbitrary, the cropping rectangle is scaled relative to the new image size.

8-Jul-2018

Fixed problems with canceling transformation dialog boxes opened for editing (either by double clicking the thumbnail in the image browser or by the Edit Transformation command).

Fixed problems in transformations that have their own preview (Gaussian Blur, Precise Gaussian Blur, Advanced Sharpen, Unsharp Mask, Bilateral Sharpen). Resizing the dialog box with bypass

no longer recomputes the preview continuously, click on title bar no longer messes up the display setting, and the Amount slider now works when there is no mask selected.

6-Jul-2018

Added a couple more methods to Stereo transformation.

Fixed problem in Clone tool when dragging cursor past the left edge of right half of split screen display.

5-Jul-2018

Fixed problem clicking mask thumbnail in image browser – this is now ignored unless the transformation dialog is open.

The Close All Images command now has an option to Save the Current Workspace before closing. This saves the workspace, ends the current session and starts a new one.

Fixed memory leak in Clone tool.

4-Jul-2018

Fixed memory leaks in Line & Arrow tool.

Fixed memory leaks in Paint tool.

Stereo Transformation: Added Background Color and Image Spacing settings and Over/Under method.

Fixed problem in Multi Color Balance – Reset did not refresh error status.

Cleaned up some color management routines.

1-Jul-2018

Fixed bug in Mask Range tool causing it not to be applied in some cases.

Fixed memory leak in Line & Arrow tool reset and Paint tool reset.

Fixed memory leaks in Layout.

Stereo transformation now does a zoom to fit when switching methods.

30-Jun-2018

Fixed crash in Mask range tool for black and white images when editing mask.

Canceling a new transformation now makes the previous image current – it used to make the input image current.

Fixed memory leak in Mask when undo is followed by a new mask operation.

Fixed memory leak in Clone reset.

Composite: Fixed problem causing overlay amount to be reset to 100% when setting a solid overlay color.

Fixed probe problems in Monochrome transformation.

Fixed resource leak in Mask Paint tool.

27-Jun-2018

Fixed bug in Mask range tool in some cases leaving horizontal bands in the mask.

Removed several redundant mask recalculations.

Fixed bug causing crash when canceling a new top-level transformation.

Fixed problem double-clicking on transformations that have no dialog box (e.g. Color Wheel, Color Chart, Simulated Q-13, etc.). This is now ignored instead of creating a new transformation.

Fixed problem causing delayed response to dragging mask range tool sliders for large images.

Fixed problem causing bypass toggle not to propagate correctly in some cases.

Fixed bug in File Save when saving over an open file with the Rename option.

26-Jun-2018

Adding a new side branch to an image now sets the first empty branch to be current. Adding a new side branch to a splitter makes the new branch current.

Fixed bug causing certain transformations to fail to respond correctly to a double-click if one or more downstream images has a mask.

Fixed bug causing scripts saved without image names to give a File Does Not Exist warning.

Fixed bug in Bilateral Sharpening when reducing number of passes if current tab is one of the eliminated passes.

25-Jun-2018

Fixed various memory leaks in Mask Tool.

Removed some mask calculations that were being repeated unnecessarily.

Fixed bugs in Mask Texture tool.

Fixed bug related to deleting next-to-last branch of splitter if the one remaining branch was empty.

23-Jun-2018

Crop transformation now sets proportions to Arbitrary when applying settings to a new image with a different size from the original image. The relative location of the cropping rectangle is preserved, but the proportions may be different. There is a small change to the command line for the Crop transformation, so this feature only applies to new commands and scripts.

Fixed various memory and resource leaks.

22-Jun-2018

Fixed layout issues in Advanced Sharpen, Unsharp Mask, Bilateral Sharpen and Gaussian Blur transformations.

Fixed problem in Create Profile transformation causing reference file name not to be restored on double click of the transformation.

Fixed problem with Clone tool drawing a band across the image if the source point was beyond the left edge of the input image.

Removed unnecessary recalc when deleting a branch and everything that depends on it.

Fixed several memory leaks in color management code.

21-Jun-2018

Fixed bugs in Resize transformation related to setting memory size.

If a file is missing when trying to run a script, the error message is now correct, and you can provide a replacement file. Also fixed problems with errors not being cleared when you replace a file in a File Open.

Fixed problems causing close of transformation dialog not to propagate changes downstream. Recalc now preserves the current image. To see the end result, press the End key to go to the end of the current branch.

Fixed crash when pressing the End key to go to the end of the current branch.

20-Jun-2018

Fixed bug causing crash when an image that had once been selected as one of several auxiliary input is later deselected and then closed.

Fixed bug in Amount control with no sliders (used to specify masks such as in Drop Shadow transformation).

Fixed bugs in Frame transformation preventing custom frame or mat images from being restored when editing transformation.

Fixed bugs in Stack Images related to initial image selection when editing transformation and overlapping controls in the Final Curve tab.

Finished applying new Cancel functionality for transformation dialog boxes opened via double click to all remaining transformations. When canceling, all settings, auxiliary inputs, and masks are restored to the extent possible to their state when editing began. An error message is displayed if any of the auxiliary inputs or images from which masks were derived are no longer available.

17-Jun-2018

Hopefully fixed problem in Color Management with changing monitor profile while images are open.

Fixed problem causing show clipped pixels tool bar not to affect displayed input images.

Major rework to default behavior of Cancel button for transformations being edited by double click. PWP now saves and restores inputs and masks to the extent possible, however if an auxiliary input image or image on which a mask is based has been closed, the input or mask cannot be restored and an error message is displayed. Implemented so far only for Add Border and Add Texture transformations.

14-Jun-2018

Image Info now reports resolution in dpi, even if default units are metric.

Fixed problems causing incorrect printer output when printing large images on a color printer with a custom profile.

Fixed problem of dpi settings not being saved when writing JPEG or TIFF files.

Fixed bug causing crash when deleting the leftmost top-level image in some cases.

13-Jun-2018

Fixed problem with closing images that were at the bottom of a branch not updating the previous image correctly. This in turn was causing problems when saving and restoring scripts.

Fixed problem causing crash in some cases when changing the monitor profile setting in the Color Management dialog box.

11-Jun-2018

Fixed problem causing Monitor Curves not to update the test patches correctly after a Load. Also made initial size of Monitor Curves dialog box larger.

Started the process of changing the behavior of the Cancel button. Transformations in alphabetical order between Add Border and Calendar have been fixed so that when you click Cancel, they request confirmation and then restore the settings and output image from the time the edit was initiated. It will take a while to get to the end of the alphabet.

10-Jun-2018

Fixed bug causing black and white images to print as blank pages.

Fixed problems with speck removal tool on Ctrl-Click.

Fixed bugs in histogram matching algorithm in Equalize transformation.

Transformations that have no synchronized scrolling button now by default turn off synchronized scrolling.

Added maximize box to Compare, Frame, and Layout transformation dialog boxes.

Fixed problem causing crash when minimizing mask dialog.

9-Jun-2018

Unfortunately, I had to remove the option of saving embedded scripts in JPEG files as WIC gives an internal error if there is too much metadata. This feature still works with TIFF files however.

Restored missing split screen button to various transformations whose output image is a different size from the input image.

8-Jun-2018

Fixed problems with mask gradient tools: settings not reset correctly after Apply, initial gradient now reversed, changes to color line were being ignored, masks were not combined correctly if mode was not Add.

Fixed various problems with mask overlays disappearing when you zoom the underlying image or not scaling when you zoom the underlying image.

Improved performance and fixed problems for Equalize transformation for 16-bit gray and color images.

6-Jun-2018

Improved the way speck and scratch removal work if the speck circle or scratch rectangle extends beyond the edges of the image. Set both max speck and scratch radius to 100 pixels.

Added minimize icons to all transformation, tool and mask dialog boxes. Clicking the minimize icon shrinks the dialog window to a small rectangle in the lower left corner of the main window. Clicking the restore icon in the minimized window restores its original size and location. This is useful if you want to temporarily get the dialog box out of the way, so you have more room to work on the image.

Fixed some issues with Match Reference transformation and made it resizable.

5-Jun-2018

Fixed problems in scratch removal tool causing part of the scratch not to be removed.

Fixed problem causing PWP not to shut down properly in some cases.

4-Jun-2018

Rewrote scratch removal algorithm to be more efficient – should fix problems reported earlier about program hanging with large radius settings. Speck and scratch removal now display single circle or rectangle in overlay instead of two concentric ones. Fixed various bugs in scratch removal.

Fixed problem with saving profiles in TIFF files – PWP7 (and presumably other programs) were unable to recognize the saved profiles.

3-Jun-2018

Create Profile: Made clipped blacks or whites a warning and not a fatal error. Profile Description and Copyright are now stored in ASCII instead of UNICODE as they are supposed to be for Version 2 profiles.

Resize Transformation: Added ability to set image memory size (now called Memory instead of File Size since file size can be different if the image is compressed or due to metadata and other overhead)

2-Jun-2018

Added new command: Edit/Hide Transformation. It hides the current transformation dialog, if any, or makes it visible if it is hidden. Keyboard accelerator is Ctrl-T.

Modified the Match Reference transformation to use latest color information on ColorCheckers and fixed a bug causing it to crash in some cases.

Rewrote speck removal algorithm to be more efficient – should fix problems reported earlier about program hanging with large radius settings. No fix yet for similar problem in scratch removal with large radius settings.

31-May-2018

Create Profile: Fixed problems reading new reference files for the ColorChecker and ColorChecker SG and added new reference files to the full install. The help topic for Create Profile has been updated to reflect this information and to correct some minor errors.

Fixed problem causing crash when attempting to read file with unrecognized file type.

30-May-2018

Fixed bug causing mask dialog docking to transformation dialog to be inconsistent.

Fixed bug causing the Edit... not to appear in the amount mask menu in some cases.

Fixed bug allowing multiple mask dialogs to be displayed simultaneously.

29-May-2018

Fixed bug causing masks to crash introduced in 28-May version.

28-May-2018

Fixed problem with loading printer curves. The Dot Gain printer curves the installer creates now have a different extension so you will need to run the full installer to get the new ones, or you will have to rename them with the extension ".cc".

Removed command to relocate settings folder as the installer always places them in the same place.

Fixed mouse trails left by Paint Tool.

Fixed problems with shift-click of amount control thumbnail producing inconsistent results.

Fixed problem with clone tool source point disappearing if the radius was too small.

Fixed problem with Print not saving custom profile in its default settings file.

Moved Tile and Layout transformations to Geometry submenu. Moved Equalize to Gray submenu.

Added curve to Equalize transformation so you can specify the desired shape of the output histogram. See help file for more information.

27-May-2018

Scratch Removal tool: Fixed problem generating error message when executing a scratch removal command with no scratches specified.

Rotate-Mirror Transformation: replaced the 8 "F" bitmaps with thumbnails of the input image with the current one highlighted with a white background.

File/Preferences: removed OK/Cancel buttons and added Reset button – when closing the dialog box, if there are changes you are asked if you want to save them or not. JPEG and TIFF default settings buttons are now always displayed and JPEG quality is displayed as a percentage. The Reset button re-loads the last saved preferences. Help file updated to reflect changes.

26-May-2018

Clone tool: Fixed various issues with display, split screen and synchronized scrolling tool bars. Now synchronized scrolling is enabled if the clone source image is the same size as the output

image. If the images have different sizes, synchronized scrolling is disabled. Also, input image setting is now preserved when editing the transformation.

25-May-2018

Fixed errors when recalculating the halftone transformation with custom screen selected.

Clone tool: Unused input images are no longer added to input list. Also fixed several bugs causing clone results not to be restored correctly when double-clicking on a clone thumbnail in the image browser. Problems affected cloning from an input image whose size was different from the input image.

24-May-2018

Fixed bugs in error reporting on color management settings mismatch warnings on loading scripts.

Fixed problem with drop shadow control not being wide enough.

Fixed bug in print causing pages to print blank (accidentally introduced 15-May).

Added new standard controls to most transformations to support auto/manual preview (similar to PWP 7).

Fixed various problems with Line and Arrow tool – changed the help topic as the Alt key can no longer be used to edit control points since it now scrolls.

22-May-2018

Fixed several problems with scrolling by alt-drag in split screen mode.

21-May-2018

Added a few more frame images (for the Frame transformation) to the Frames and Tiles Folder created by the installer.

Clone tool – fixed problem of leaving trails behind when moving cursors.

Layout transformation – fixed problem causing units to be reset every time and crash when adding a new panel in some cases.

Amount controls – on transformation startup, single amount sliders are no longer reset unless a mask image is present, in which case the mask is cleared and sliders are reset.

20-May-2018

Added a few more frame images (for the Frame transformation) to the Frames and Tiles Folder created by the installer.

Fixed bug in Frame transformation for frames with predefined profiles (e.g. triple bead) not matching up on the upper right and bottom left corners.

Moved the handle for the separator bar between the image browser and image area from the bottom to the center where it is less likely to get obscured by a transformation dialog.

Launching PWP by double-clicking on a file or otherwise via the command line now sets the folder containing the file as the initial folder for subsequent file open commands. Fixed other problems with initial folder not being set correctly.

19-May-2018

Added Mirror Image checkbox to Print dialog box.

Restored support for opening Photoshop ACV and AMP files in Color Curves transformation.

18-May-2018

Fixed problem causing auxiliary inputs not to be reset for some transformations when the transformation is reset (includes Clone tool).

Added linear and oval mask gradient tools (see updated help file for more info). You will need to do a full install to get the new bitmaps and help file.

17-May-2018

Fixed problem with not being able to load default (and other) settings files due to missing null at the end of the command line.

Fixed problems with scrolling in split screen mode with auxiliary input in left half of screen (e.g. Clone transformation with a separate source image).

Fixed some minor spacing issues in Color Balance and Multi Color Balance.

16-May-2018

Fixed serious bug accidentally introduced in 14-May-2018 version causing infinite recalc loop when inserting a transformation in the middle of a branch and clicking OK.

Fixed problem causing crash when attempting to clone an empty branch.

Fixed problem with zoom out and zoom 1:1 with split screen.

Fixed problems in Clone tool with display toolbars.

Fixed problem causing error message on shutdown about converting to monitor color space.

Fixed problem causing splitters and branches to show up in image menus when selecting images.

Fixed problem causing crash in Layout when deleting panels.

Fixed problem restoring monitor curves file from script on color management settings mismatch.

Crop transformation – the button that resets the cropping rectangle to the entire image now resets the angle as well and does a zoom to fit.

Fixed problem in Bilateral Sharpen, Precise Gaussian Blur, Advanced Sharpen, Unsharp Mask causing bypass button in transformation dialog not to show input image in preview area.

15.5-May-2018

Fixed problem saving profiles in TIFF files.

Fixed problems with display tool bars in Clone tool when in split screen.

15-May-2018

Fixed several problems with closing tool and transformation dialogs.

Changed the way images are stored to allow for larger maximum image size.

Fixed problem converting images to 1-bit binary with the Convert transformation.

Added palette rotation amount control to Tint transformation (see updated help file for more information).

14-May-2018

Fixed problem causing crash in Line & Arrow tool when clicking on input image.

Fixed problem in Line & Arrow causing overlay not to be reliably displayed when preview button clicked.

Fixed crash on shift-click on amount control thumbnail.

Fixed a number of problems causing crashes when closing transformation dialogs and other images referred to the output image as auxiliary inputs or as masks. Now you can no longer leave a transformation dialog open and switch to another image unless the dialog was opened by double clicking on an existing image. This prevents going back to the open dialog and canceling out, effectively deleting the image, while other transformations still refer to it. Also, closing an image from the image browser no longer gives you the option of closing just the current image if the output of the transformation is referred to as an auxiliary input or mask in another transformation.

13-May-2018

Optimized recalc when switching display between bypass and non-bypass modes.

Amount Reset and Transformation Reset now reset masks correctly.

To drag the separator bar between the image browser and the main image area, you now drag the white diamond at the bottom of the separator bar. This avoids accidentally dragging the separator bar when you are trying to drag the cropping rectangle or other overlay right next to the separator bar.

Fixed problem in Add Border color picker.

12-May-2018

Made sure Mask dialog gets control on New Mask or Edit Mask.

In Crop transformation, when setting proportions to other than arbitrary or custom, landscape or portrait is set automatically to match image aspect ratio.

Fixed problem in Tint transformation for 16-bit images.

11.5-May-2018

Fixed bug in bilateral sharpen when called from Adjust transformation.

11-May-2018

Reworked Adjust to hopefully avoid problems with Sharpen = 100% with mask.

Fixed several problems in Line and Arrow tool. The tool now has a new Preview button (looks like an eye, next to the arrowhead sharpness buttons) which rebuilds the output image based on all the arrows you have specified so far. This operation used to be automatic as you adjusted each arrow but could be slow for large images. There is still a problem that if a line in the overlay if

less than one pixel wide, it vanishes since the overlay is drawn in XOR mode and gets drawn twice in the same location, erasing the line in the process.

10-May-2018

Fixed bug in Texture causing crash on reset.

Fixed bug in Texture causing reset not to close all color pickers.

Fixed bug in Color Line control causing it not to close all color pickers on reset.

Fixed bugs in Autorange in synchronized scrolling display.

Fixed problems reading color images with an alpha channel (the alpha channel is discarded).

9-May-2018

Fixed problems with saving and loading profiles in JPEG files.

Added code to set Software Used tag in TIFF and JPEG files to current PWP version number.

Fixed problem causing blank help file display.

8-May-2018

For 48-bit color images, Edit/Count Colors now computes the number of unique 24-bit colors.

Fixed bug causing slight error in reporting of GPS coordinates and locating them on Google maps.

Modified Line and Arrow tool to update preview when adjusting line width with mouse wheel.

Switched from GDI+ to WIC (two Microsoft image file libraries) for reading and writing TIFF and JPEG images. This solves the problem of being forced to save grayscale JPEGs as color, adds JPEG chroma subsampling options and provides support for both LZW and ZIP Tiff compression.

4-May-2018

Fixed problem in Crop transformation with $n \times n$ grids off by 1.

Fixed bug causing crash when selecting a mask image after a previous Reset.

3-May-2018

Fixed slight overlap of tab control at bottom of Monochrome transformation dialog.

Fixed problem with Crop transformation not applying resize or resample settings on OK.

Fixed problems with Mask Edit not restoring current settings to defaults.

Fixed problem causing Crop transformation to flash 2 seconds after starting up.

2-May-2018

Fixed several bugs in Clone Side Branch for images with masks.

Fixed several bugs in saving and opening scripts that include masks and splitters.

When saving files, the extension is now omitted. The correct extension is automatically added based on the file type when you click OK. This lets you change file type without having to edit the filename.

Fixed problem with Autorange transformation not closing its mask dialog on exit.

Zero-centered amount controls now initialize their mask to black instead of gray.

Mask Reset via the Amount control now completely removes mask. Mask Reset via the Mask Dialog settings menu just clears the mask.

Removed comment about double-clicking on mask thumbnails from the help file.

Apply buttons for Rectangle, Oval, Polygon and Spline mask tools are now grayed out when there is nothing to apply.

Fixed bug in mask causing Oval and Rectangle mask operations to be incorrectly encoded in the command line and thus not restored correctly on a double click or loading a script.

1-May-2018

I am still seeing occasional errors when trying to reload workspace scripts saved on exit from PWP. I have appended debugging code to the end of workspace scripts to try to find out why there are sometimes errors restoring them. If you get an error reloading a workspace script, please email or post the workspace script file and I will now have a snapshot of the image tree at the time the file was saved.

Image menus now highlight in red the names of any images currently selected as inputs for the current transformation. The initial selection in the list is the currently selected input.

Adjusted spacing of input and mask thumbnail captions in image browser.

Fixed problem causing images not to be zoomed to fit after running a workspace script.

When loading a script or workspace script and the workspace is not empty, you are now given the option of clearing out the workspace before loading the script (or not).

30.5 Apr-2018

Launching PWP from an external program when PWP is already running but minimized now restores the PWP window before opening the image.

Added Overlapped setting to Clone tool to allow cloning from the output image to itself (the way PWP7 worked). Setting Overlapped to No clones from the image as of the previous stroke.

Warning: this change invalidates any previously saved scripts that included cloning. Updated the help file topic for the clone tool.

Various transformations – removed the current output image from the image menus for selecting auxiliary input images.

Fixed problem running scripts including Clone or Paint tools.

Fixed problem launching PWP with a workspace script from an external program such as double clicking a workspace script file in Windows Explorer.

30-Apr-2018

Fixed problem creating new top-level images that affected saving and loading workspace scripts.

Fixed bug in Compare transformation causing crash on OK.

Added Run Embedded Script to context menu when right clicking on a thumbnail in the image browser for a top-level image that has an embedded script.

29.5-Apr-2018

Removed unnecessary image recalculation when clicking OK for all transformations except those that have separate previews (e.g. unsharp mask, advanced sharpen, frame, layout, etc.).

Fixed problems with several transformations ignoring Apply button.

Image menus for auxiliary inputs now correctly exclude all downstream images.

Crop transformation, if default settings have proportions other than arbitrary, reset the cropping rectangle as large as possible with the specified proportions. If the proportions are arbitrary, the cropping rectangle is set as a proportion of the image width and height. Thus, if the original image was cropped to include just the right half and those settings were saved as the defaults, applying those settings to other images would also crop just the right half, regardless of the size and shape of the image.

Fixed bug in Lens Distortion causing changes to Scale to affect the distortion correction.

Fixed bugs in code that converts multiple images with different profiles to the same color space.

Fixed problem causing Add Side Branch command to be grayed out for splitters.

29-Apr-2018

Two- and Three-Zone transformations: removed B (before) button since the same effect can be obtained using the bypass buttons at the top of the dialog box. Also made No Histogram Expansion the default default setting (you can still customize this setting by saving a default settings file).

Fixed bugs in resize transformation. Changing Set to one of the values that preserves proportions was not resetting the proportions if they had been changed before. Reading settings from a resize settings file did not restore the settings correctly.

Fixed bug causing crash when attempting to open an image of unrecognized type. Where possible, on file open errors, you now get another chance to select a file rather than proceeding with an error.

Fixed bug in Precise Gaussian causing amount control not to affect preview if there was no amount mask.

Fixed bypass button in image browser. Now it recalculates the current image if it needs to. Images depending on the current image are still recalculated. This allows for quick toggling between the input and output image state if the current image is the last one in a branch.

28-Apr-2018

Fixed bug causing rotated JPEG files to have the wrong orientation when saved.

Fixed several problems with launching PWP from external programs when a copy is already running.

File Save with name conflicts changed to avoid unnecessary calls to Windows File Save dialog box.

Fixed problem in Frame with mat textures.

Optimized code to reduce screen flashing.

Fixed problem of some transformations giving an Illegal Image Type error when clicking OK if a Mask Dialog was open.

27.5-Apr-2018

Rotate-Mirror – the 4th and 8th bitmaps in the tool bar showing the F in various orientations were incorrect. To fix this you will have to run the full installer to re-install the bitmap files, but the bug is purely cosmetic.

Fixed problem making it impossible to drag separator line between the image browser and the image area into the image area when a probe was active.

Fixed bugs in Posterize depending on image type, palette and amount slider.

Fixed bugs (again) in many of the transformations that produce new top-level images (e.g. Stack Images, Combine Channels, Layout, etc.). They were setting the current image to an illegal value when the transformation dialog was canceled or closed.

27-Apr-2018

Fixed problem reading black and white images which have EXIF data indicating sRGB or Adobe RGB color space being assigned a color profile and then failing to open.

Fixed all sharpen transformations to set halo sliders correctly (they were still reversed when setting from a script).

Fixed bugs in many of the transformations that produce new top-level images (e.g. Stack Images, Combine Channels, Layout, etc.). They were setting the current image to an illegal value when the transformation dialog was canceled or closed.

26-Apr-2018

Fixed problem with black and white halo control sliders internally reversed in all the sharpen transformations. This was not obvious because the sliders were also reversed.

Modified code to read JPEGs so it should handle all possible orientations correctly.

Fixed bugs in Layout:

- Move to Front and Move to Back not working correctly in some cases.

- Remove Panel not working correctly in some cases.

25-Apr-2018

Fixed bug in Mask dialog – masks were being computed based on the output image and not the input image.

Fixed some minor issues with printing.

24.5-Apr-2018

Fixed bug in image type and color space merging from previous release when both images had same type and color space.

24-Apr-2018

Changed extension for workspace scripts from ".workspace script" to ".workspace" to improve the installer file associations display. The folder is still named Workspace Scripts. By a quirk of Windows the extensions both match "*workspace".

Stereo transformation now outputs its input image if there is no second image specified. This eliminates the error on startup. Also fixed problems with side-by-side method and negative offsets.

Image browser captions are now left justified instead of centered so the image number is always visible.

Updated a series of transformations that work on more than one image so they handle images of different types and color spaces correctly. Previously in some cases either you would get a profile mismatch warning and computation would proceed ignoring the mismatch which might combine images with different gammas or color spaces incorrectly. Now, if there is an image type or profile mismatch, both images are converted to a compatible image type and the working color space and the transformation continues using the converted images. The modified transformations are: Add Border, Difference, Composite and Filter. Also modified other transformations to require an exact type, size and profile match among all inputs. The modified transformations are Combine Channels, Stereo and Stack Images. Finally, the Compare and Frame transformations were modified to convert all inputs to 24-bit color and the working color space – the output image for these transformations is always 24-bit color.

23-Apr-2018

Fixed bugs in Resize transformation when entering physical units in cm or mm. Corrected some errors in the help file for Resize.

22-Apr-2018

Changed interface for histogram of masked areas only to a button, and extended the feature to the Adjust and Monochrome transformations.

Fixed problem in Image Info dialog box leaving a sliver of text showing when switching from the Image tab.

Fixed problems causing errors displaying black and white images with monitor profile set to None.

Fixed problems in Crop transformation with units set to cm or mm.

21.5-Apr-2018

Fixed problem with toggle bypass in image browser not always working.

Added option to the Brightness Curve and Color Curves transformations to histogram entire image or just the currently masked area. Interface refinements and extension to other tools and transformations to come.

Fixed bug making it impossible to save 24-bit color images as JPEG.

21-Apr-2018

Fixed problem with saving PNG files with sRGB profile.

Fixed problem with amount control in Multi Color Balance.

Added error check on File Open for color image with gray profile or gray image with color profile.

When saving black and white images as JPEG, a warning is issued, and they are saved as 24-bit color – this is a limitation of the Microsoft GDI+ JPEG code which cannot save black and white JPEGs.

20-Apr-2018

Thumbnail images are now color managed.

Fixed bugs in Mask Curves tool for operations other than Add.

Fixed bug causing crash in Contour transformation for solid color monochrome background and line color and Amount < 100%.

A left-click on a bypass button in the image browser now makes the image current. A right click on a bypass button toggles the bypass setting without making the image current.

Embedded scripts now stored as UTF-8 strings instead on Unicode – hopefully will trigger fewer antivirus false positives. In any case will make the files slightly smaller. The original Unicode scripts are still supported so current files will still rebuild.

Set default zoom blur to zero so it takes less time to start up initially.

19-Apr-2018

Added macros for time and date photo was taken (in addition to existing macros for time and date file was created or modified).

<<taken date and time>>	date and time photo was taken
<<taken year>>	taken year
<<taken month number>>	taken month number
<<taken month abbr>>	taken month abbreviation
<<taken month full>>	taken month full
<<taken day>>	taken day
<<taken date>>	taken date
<<taken time>>	taken time

Changed various menu graying settings and right-click menu in image browser for side-branches.

When reading JPEG images, opRGB (inserted by Microsoft JPEG reader?) is now automatically replaced with Adobe RGB.

Fixed problem causing some rotated TIFF files to read in upside down.

Fixed several bugs related to cloning branches that contain splitters.

Fixed problems with clone tool crashing or misbehaving in some cases.

18-Apr-2018

Edit/Edit Transformation now grayed out for splitters and branches.

Text Transformation: text box overlay size now reflects macros, if any in text string.

Fixed various problems where menu items should have been grayed in certain situations.

Fixed bugs related to moving images up and down.

Fixed incomplete image browser display after loading a workspace script in some cases.

Compare transformation now displays images A and B names as the same caption as used in the image browser.

17-Apr-2018

Crop: changed the way composition guides are specified (now in a second control instead of combined with all the built-in ones). Added Golden Triangle Left/Right to the list of built-in guides.

Multipoint Gradient: fixed problems with clicking on image area with color picker open.

Fixed two bugs that were causing crash in Stack Images with no image selected.

Fixed bug in Drop Shadow transformation causing shadow not to be recomputed correctly in some cases when altering the mask.

Implemented a simplified version of the Calendar transformation that lacks support for holidays and various other settings. Will see about putting the other features in later.

Minor bug fix in Image Info dialog.

Fixed bug causing incorrect image to be displayed in the left half of split screen during synchronized scrolling initiated by dragging the hand cursor over the image.

16-Apr-2018

Stack Images: removed 15-step gray target since you can now use the Test Patterns/Simulated Q-13 to create a simulated Kodak Q-13 21-step target and print it out. Made various user interface improvements including switching to split screen so you can compare the current input image against the result image. Fixed various probe issues – the curve probe is now only active if there the current input image is present and if the Brightness Curve tab is active.

Added Transparent PNG transformation to let you create semitransparent PNG files for web sites.

Fixed crash when closing an image that was inserted between two existing images.

Fixed bug causing splitters to be incorrectly restored in script files.

15-Apr-2018

Multipoint Gradient: fixed problem with Adjust Brightness (HSV or HSL) for 48-bit color images and problem with Color number not being updated in dialog box when clicking on a control point.

Fixed bug causing random behavior when closing images if the Show Dependency button in the image browser was not depressed (this is the colored button at the top of the image browser next to the + and -).

14-Apr-2018

Fixed problem in Multipoint Gradient where clicking on a control point without moving it caused it to change position.

Implemented a version of the Stack Images transformation from PWP 7.20, but with a cleaner interface. Details in the help file.

13-Apr-2018

Fixed problem of truncated text in Print dialog box for Page Size and dpi.

Fixed other Print problems that, among other things, allowed the image size and cropping rectangle proportions to get out of sync.

Fixed problem reading TIFF files written in Mac byte order. This problem only affected certain metadata, which was being garbled. TIFF files in PC byte order were OK.

Fixed problem in Multipoint Gradient causing Match Input Image checkbox not to work.

12-Apr-2018

Fixed bug causing TIFF and JPEG save options in Preferences not to be retained.

Fixed problems with Copy transformation not being grayed out when no images are open and not zooming the image to fit initially.

Fixed problem when closing the last top-level image causing random behavior and crashes.

Fixed bug in composition guides (they were upside down) – composition guides from PWP 7.20 are now included in the standard install.

11-Apr-2018

Made Print dialog box resizable, fixed some problems with the print preview and added better shading to illustrate margins and unfilled image area in the preview.

Fixed problem with saving scripts with image copies.

Fixed problem in Layout with reading settings files from earlier releases.

Fixed several mask bugs related to masks on auxiliary inputs as in Layout (panel masks), Wave (custom image masks) and Composite (overlay masks).

10-Apr-2018

Added File Preferences setting to optionally suppress asking for TIFF and JPEG options on every file save.

Fixed problem causing settings files to be written as 16-bit Unicode instead of UTF-8. This prevented them from being edited in Notepad.

Added display tool bar to Layout transformation.

Layout: Fixed bug causing crash in some cases. Fixed bug causing wrong image to be displayed when clicking on a layout panel in some cases.

Fixed bug parsing quoted strings that contain carriage returns. This caused script load errors for text with returns.

9-Apr-2018

Fixed problem in most transformations where starting a new mask would split the screen but not set the transformation dialog buttons to indicate split screen.

Fixed problem in most transformations where turning synchronized scrolling on hid any mask overlay.

Fixed problem with Paint and Clone tools that caused incorrect screen updates during strokes if the image was zoomed so it had scroll bars.

7-Apr-2018

If you move the mask dialog box from its default location just above the transformation dialog box, it no longer snaps back to the default location every time you switch mask tools.

Fixed bug in Monocolor with Amount slider < 100%.

Fixed problems with monitor curves setting and various other settings in color management dialog box. Monitor curves and other color management settings now saved in script files. If there is a mismatch of color management settings when loading a script, after warning of each mismatch, you have the option of restoring the settings in effect when the script was saved.

Fixed problems causing Mask Overlap mode for certain mask tools to fail.

6.5-Apr-2018

Fixed crash when inserting some transformations into an empty side branch.

Fixed crash when scrolling when a side branch was selected as the current image.

Fixed problems with some dialogs being forced off-screen to the top or left.

Fixed problem causing mask dialog not to get control in some cases.

Fixed problems with display and synchronized scrolling tool bars not being reset correctly after loading a settings file

6-Apr-2018

Readout tool settings: added Display 0..255 option.

Readout tool now works on both halves of split screen. Other probes now work on the left, right or both sides of a split screen, depending on what is appropriate for the currently active tool, control or transformation.

Fixed problem with various probes operating outside the main image area.

Fixed problems with tool probes not being activated by clicking in the title bar of the Readout, Magnifier and Histogram tools.

Fixed problems with scroll tool and Alt-drag not working with split screen. Now, if synchronized scrolling is in effect, scrolling one image scrolls the other at the same time. If synchronized scrolling is turned off, scrolling is limited to the image being dragged.

Halftone Transformation: fixed bug causing crash after double click of existing image.

Equalize Transformation: fixed bug from aborting histogram match.

Frame: cropping rectangle is now always maximized when changing Base Size On selection.

4-Apr-2018

Fixed problem with loss of control of cursor when dragging an overlay outside of the image area, e.g. when adjusting a copy box and accidentally dragging it slightly across the separator into the image browser.

There are now two File Save commands: Save Back and Save As. Save Back sets the initial folder to the folder the original image came from (if any), and defaults to the same filename as the original file. Save As sets the initial folder to the last folder you saved files in and defaults the filename to *.*. If there is no original image (i.e. if the top level image from the current branch is not from a File Open), Save Back acts like Save As.

Toggling the bypass button on/off should now display the normal and bypass images with the same zoom and scroll settings if the normal and bypass images have the same dimensions. Otherwise, they zoom and scroll independently.

3-Apr-2018

Crop: Fixed problem with dragging the lower left corner of the crop box. Added support for custom composition guides. For details, see the help file. The format is a simplified version of the one for version 7.20.

Selective Color Correction: Fixed problem for 48-bit color images when checking Show Affected Region. Fixed color management error when checking Save As Mask.

Advanced Sharpen: Fixed crash on attempting to create a mask via the Amount control.

2-Apr-2018

Fixed problems with 16-bit images in Blur/Blur More and Sharpen/Sharpen More and some minor problems in several other transformations as well.

Fixed problem in Color Management settings with using system monitor profile.

File Preferences – there is now an option to move the default settings folder (where transformation settings, curves, color lines, scripts, etc. are stored by default) to a new location. To implement this, it was necessary to remove the preferences folder itself from the default settings folder to a different standard location (C:\users\\AppData\Local\Picture Window Pro), so you will either need to copy them manually or re-enter them the first time you run this release. Keeping all the settings together in the default settings folder makes it easier to back them up or move them to another computer. If you have settings files that are specific to an image, you can, of course, save them with the image if you prefer.

Monitor Curves: Fixed problem preventing reading of monitor curves in the File/Monitor Curves dialog box. Fixed various problems with the Monitor Curves toggle in the main tool bar and other issues. Updated the help file to more closely represent the actual behavior. Toggle in main tool bar is now enabled if the Monitor/Printer Curves dialog is open or if the monitor curves are not reset. The dialog caption should now display the filename of the current curves in any were loaded. The File/Monitor/Printer Curves command was removed as there was already an Edit Monitor Curves button in the Color Management dialog box. The monitor curves to load on startup setting in Color Management should now be working.

1-Apr-2018

Fixed problem in Crop transformation causing user-entered size and dpi settings to be ignored. Note: the resize settings are not reflected in the preview, only in the final image when you click OK.

Changed the way sliders work – instead of using shift-click on one side or the other of the slider marker to increment or decrement the internal slider value, holding down the shift key while moving the slider increases the resolution by a factor of 16 at the expense of reducing the range of adjustment. To set a slider precisely, first click and optionally drag until you get close to the desired value, and then hold down the shift key and drag left or right to make the fine adjustments. Added a help topic on slider controls.

You can now scroll or zoom an image, even while another mode, tool or transformation is active, by holding down the Alt key. This changes the cursor to a hand and returns to Scroll mode until you release the Alt key.

Added the new Copy transformation. It lets you select an input image and then copies that to its output image. By building a workflow after Copy, you can go back later, select a different input image, and when you click OK the workflow recalculates based on the new input image.

Fixed problem with Open With... from Explorer not working if PWP was already running.

You can now drag and drop image files into PWP two ways:

- 1) If you drop one or more image files into the main image area, each one is opened as though you had used the File Open command.
- 2) If you drop a single image into a thumbnail in the image browser for an image created with File Open, then the dropped file replaces the currently open file and the rest of the branch is recalculated.

31-Mar-2018

Added File Associations Dialog to installer.

Fixed problem in Blur, Sharpen and Median Blur where setting Amount to zero increased the output image size slightly.

Fixed problem causing click on close icon of an image in the image browser with an open transformation dialog could close both the image and the previous one. Now, if the transformation dialog is open for the first time, both the dialog and the image are closed. If the transformation was opened via a double click, the dialog is simply closed – a second click on the close icon then closes the image.

Added support for automatically rotating JPEG images shot in portrait orientation when opening the file.

Added amount control to Autorange transformation.

Fixed problem causing crash using Selective Color Correction with a mask after clicking OK button.

Fixed problems arising from creating and canceling the transformation dialog for a top level image. In some cases this was causing an infinite loop when closing PWP that prevented it from shutting down.

30-Mar-2018

Fixed problems with curve reset for some hue curves. Fixed problems with using probes with curves. Fixed problems with Shift-Click inserting multiple curve points in some cases.

Fixed problem of the color profile not being saved in JPEG files, even if it was checked as included. You can now drop one or more files on Picture Window Pro's main window and it will open all the dropped files, one at a time.

Fixed problem causing a crash when deleting certain branches from the image tree.

Fixed problem in Add Border for unequal rectangular borders with top border non-zero.

Fixed image browser problem allowing toggle of bypass button for images whose bypass value is fixed (e.g. File Open, Paste, File New etc). Also made sure all transformations that create a new top-level image have their bypass button locked.

Added a TIFF Options dialog box that comes up when you save TIFF files. This lets you specify what metadata (Profile/EXIF data/GPS data/Embedded Script) is or is not included in the TIFF file and the type of compression you want to use, if any (currently disabled pending implementation of this feature).

29-Mar-2018

Added code to force initial transformation, mask and color checker dialog boxes to be visible. This was a potential problem on low resolution monitors.

Fixed problem causing truncation of the speck histogram in Advanced Sharpen.

Fixed problem with mask brush tool drawing extra strokes – to improve performance, the mask display now updates only when releasing mouse button, not on every mouse move as before.

Fixed problem causing the Clone Tool to fail on 48-bit color images.

Advanced Sharpen: Shift-clicking on input image now displays the red histogram probe until you release the mouse button.

Advanced Sharpen, Bilateral Sharpen, Unsharp Mask, Gaussian Blur, Precise Gaussian Blur:

Clicking on the input image should now reliably re-center the preview around the point you clicked.

Removed scroll bars from the preview area – instead you can now drag the preview left/right/up/down to scroll (the cursor changes to a hand over the preview area). Note: scrolling by dragging can be slow if the transformation is compute-intensive or the preview area is enlarged.

Added bypass buttons  to the transformation dialog box to allow toggling the preview on and off. These bypass buttons mirror the bypass toggle in the image browser.

27-Mar-2018

Fixed error message when loading previously saved mask settings.

When loading or saving settings files, the file extension is now set automatically in all cases.

The JPEG save dialog now has separate checkboxes for including profiles, EXIF data, GPS data and embedded scripts in the saved file. Also fixed some related problems with image file metadata.

The File Open profile conversion dialog box is no longer displayed in color management is disabled.

Cancel (or clicking the close icon) in the File Open profile conversion dialog box now issues a warning and continues with the file profile unchanged.

Launching Picture Window Pro multiple times just opens the first instance and no longer creates multiple copies of the application.

Gray/Change Profile applied to 48-bit color images no longer fails with an error message.

Fixed bug in Crop causing a crash if the crop box covered the entire image and the horizontal or vertical centering button was clicked.

25-Mar-2018

First alpha release.