DP2 Cumulative Changes up to v20.3.99

This document lists the fixes, changes, and/or enhancements found in each build of DP2 version 20.3.

Cumulative from v20.3.87 to 20.3.99

NOTE: This version of DP2 was not validated to be compliant with KC2. The last version of DP2 validated to be compatible with KC2 was v20.2.19.

General Enhancements

- Added new built-in Events that are triggered automatically by printer errors. (PrinterBatchError and PrinterResponseError). There is also a new sample email template included for this, plus a new built-in Action that can be registered to the new events which will send the printer error email.
- Added a few general email improvements to handle multiple recipients on To, CC, or BCC's as well as
 the ability to send attachments.
- Added several things to facilitate sending emails as text messages. There's a new Generic Text
 Message Sample template that shows using a non-HTML based email as well as a new "Is Text"
 column on the Email Templates table that can be used to achieve cleaner looking text messages
 being delivered through most providers. Also included is a new Text Messages tab on the Email
 Manager to provide some guidance.
- Added a check at startup to confirm the workstation's Shared Directory setting matches the server's setting. Intermittent issues can be caused when multiple workstations use different paths (or UNC's) even if they actually resolve to the same directory. This new check will present a warning if the server and workstation don't match. (The correct way to setup DP2 is to have all workstations and the server to use exactly the same Shared Directory setting.) Also, on startup the workstation will log its current setting for the Shared Directory to the workstation settings table, providing an easy place to see if some workstations seem to be mis-configured.
- Improved the URL Parameter parsing in the HTML Preview window for Email Templates. It will now deduce more things (like CustomerID) instead of requiring them to be entered manually.
- Added Edit Data and Load Data buttons to the Remote Work Queue (and fixed a problem with the Debug button).
- Added tooltips to the Debugger's Step buttons
- Removed the automatic creation of the "rDP2" Work Queue (wasn't breaking anything, and it won't delete it if it is already there but it was causing confusion when it kept being created).

Bug Fixes

- Fixed an un-initialized memory read problem in the KPL parser. (It had been there for a long time,
 was pretty obscure to get to, but did cause a problem when creating new email actions for an event
 when running a VS2017 build of DP2).
- Fixed a problem where the Export Images Setup wasn't handling a blank EventID properly.
- Removed Group Picture from the task list. (That functionality had been removed earlier, but this task list button was overlooked.)
- Fixed a problem with "Remove KC2 Templates From" in the DP2 Email Templates window. It was displaying "Not Implemented".
- Fixed a problem where "View Images for This Product" wasn't working correctly for composites and packages.

Cumulative from v20.3.1 to 20.3.86

General Enhancements

- Added a major new set of tools that allow lab defined triggerable events that have a set of actions
 registered to them. This is a powerful mechanism for lab customization, and more than can be
 explained in a couple lines here. (Examples of what a lab may want to do with this: automatically
 generate emails when an order is received; or automatically generate order reports.) See the DP2
 help for an introduction.
- Added some robust new email capabilities to the DP2 engine. These include storing multiple SMTP server choices with different parameters, diagnostics for communicating with the server, and email templating support.
- Added the ability to automatically trigger an event on completion of an Export Images operation.
 Different events can be triggered for different setups.
- Created a new user extensible mechanism for "Layout Helpers"
- Created a new "Layout Helper" that will be included in the stock DP2: a calendar month builder. This guides the user on building "months" for a calendar. It generates nodes that represent a given calendar month with customizable user parameters (including margins, gaps, text sizes, fonts, colors, etc.). The calendars are then dynamic, working for any year or range of months to allow for a more automated or streamlined workflow (without needing to redo the work every year).
- Added Street2 to the customers table
- Improved the performance of general DP2 drop downs containing many items

- Modified tooltip of MultiPageQty on Save Image Dialog
- Added the macro SubjectFieldForNodeOrField2And3(Node,Field1,Field2,Separator,Field3)
- Added "View OrderItems by Workflow" to the OrderItems Window view right click menu. (This is
 just a navigational aid to get to the same functionality that already exists in an Orders window or the
 Select Order window.)
- Added a PrintComplete keyword to the output node, which allows specifying a script to run after all
 other scripts have run. (There are two other related Keywords: PrintCompleteData: and
 PrintCompleteTrigger: that can be set in the output node as well. These are accessible from the
 Page GenCon in the Init() of the script.)
- Reduced the memory needed to open PNG files
- EXIF data is now maintained properly when doing a DP2 ChromaKey Repair operation
- Added a right-click menu option to Manage Images and Digital Analyzer interfaces to set DP2 image rotation using image metadata tag values
- Provided a hook for specifying an OrderComplete Script in a layout (the following keywords were added to the output node: OrderComplete:, OrderCompleteData:, OrderCompleteTrigger)
- Removed the OrderID Dropdown from 'Set SubjectID For Images Based On Matching Filenames'
- Spillover can now be specified as a "percent" for disk printers
- Change ProductsOrderedForImageInNode() macro to allow for products to be excluded
- Added a None option in "View Items In Workflow" and "View Items Not In Workflow"
- Allow user customizable manipulation of rendered text through a new AfterNodeRender() hook with a CompositeType of CompositeText
- Changed the Head Alignment cropping guidelines to a pure color overlay when the default color has been overridden (to improve usability on certain jobs/background colors)
- Updated the EULA to display in a more readable way
- The JobQueue UI now has separate panes for important data versus asynchronous messages
- The JobQueue dialog's limit on the number of batches has been raised to 300 (it was 30)
- The "Open Containing Folder" menu option has been changed to Select All Selected Items from the view. (This is available in a lot of places: Manage Images, OrderItems, Images, Products, etc...)
- Switched to a better session logging mechanism in a number of places
- Added a "View Order&Items For Selected Subject(s)" right click to the SubjectInfo window to
 provide a quick way to navigate to a subject's OrderItems from the SubjectInfo window

- Added a way to set the Workflow for OrderItems based on the workflow of their product
- AddOrderItem() and UpdateOrderItem() in cmds.txt will now provide a default for Workflow
- Changed the KPL statement: Debug(DumpScriptInfo) to place each script file on a new line in the session log. (Previously it was all strung out on one line.)
- Added If and IfNot as valid operators for the KPL Log() function. This allows simpler code for
 optional session logging. The following are examples: Log(If,<WantLogging>,Session,~This is the
 message to log~); or Log(IfNot,<level> > 2,Session,~This is the message to log~);
- Added a Nop() function to the KPL language. Syntax: Nop(param1,param2,param3); It will always return TRUE. (Useful with ModifyKPLFunction as a way to disable the call to a function. Simply change the function or method name to a NOP.)
- Changed Trace Subroutines (in the Trace Dialog of the Edit menu) to Trace more information about subroutines that are being loaded and whether or not they are being loaded more than once. It also helps show when a routine is being replaced by a routine of the same name from another file.
- Added a hot key to get to View Items in Workflow
- Better handling of KPL script files that don't have Windows style <CR><LF> line endings
- Added body length to the tracing of an HTTP request to the DP2 web server
- Composite Job Generator and Deliverables Window can now identify a range of images that belong to the same subject based on a field of your choice in the subject info table
- Made the 'Find Duplicates By' control in Composite Job Generator into a dropdown with a scrollbar (so it is easier to use)
- Added a search dialog to the SBA Data Window
- Added a script call (mainly for diagnostics) to analyze difference images: ImageMem::AnalyzeDiffImage()
- Added OptionalInclude(~<\$App.ScriptOverrides>\<\$Job.Name>~); to MajorKeywordsDialog.txt to allow labs to override the behavior of that dialog
- Added KPL support for more PIEGraphics routines
- Added a new keyword "NoRenderOverride:" so that the "NoRender:" keyword could take a macro
- Allow editing and the ability to add macros to the Chromakey Background ID field within the Product Info and Image Node Properties
- Support for Strokes on Image nodes to be both inside and outside the node (simultaneously)
- Added "DP2 Service Desk" to the DP2 help menu

- Removed the Save button on the Debug dialog (since it didn't work well) and replaced it with a new Edit button
- Did some experimenting with Cut/Crop marking by way of a "ShowCropMarks" selection on the "Coords" table of the Image Node Properties Dialog. This is still in the investigation phase, and requires a special setting to turn it on.
- Automatically audit the shared directory setting (from the initial DP2 setup's Database Connection and Shared Data Location and remove trailing backslashes (they cause problems)
- Add Macros to KPL that map to some standard compiler macros (<\$Compiler._MSC_VER>;</\$Compiler._MSC_FULL_VER>;</\$Compiler._MSC_BUILD>;<\$Compiler._ATL_VER>;</\$Compiler._MFC_VER>;<\$Compiler._DEBUG>)
- Added a "Duplicate" menu item to the ShootDesc window
- Added a new snippet to the HTML Assistant for "ExternalDatabases\Access data from your own database"
- Improved the line formatting in the HTML Assistant when you open snippets as an html window
- Changed the installer to run with the Administrator execution level. (This runs the installer in the same way as the user right-clicking on the installer and selecting Run As Administrator.) This will help on systems that require elevated privileges because of the way their users and privileges are set up. Users may now be warned or prompted for admin level credentials when they run the installer.
- Added a dropdown selection in Export Images to allow automatic triggering of an Event upon completion.

Bug Fixes

- Fixed some problems with ImageFieldsFromOrderItemVertically()
- Fixed an issue where combining "copy pixel" and "flip to mirror" left a (often white) pixel line artifact
- Fixed a problem with PNG files reporting incorrect file resolutions
- Fixed a problem in BaseInternet.txt where fPort and fPassive were not being set correctly
- Fixed a problem when opening a SubjectInfo window from the OrderItems window when a subject info window for another order was already open
- Changed GetPreferredSetup() in ExportImagesDoc.txt to not report an error if it can't find a record
 in the customer table when it is looking for the preferred export image setup for a specific customer
- Fixed a problem where rLogo, gLogo and bLogo in customer data couldn't be set to values greater than 99

- Fixed a problem with crops not saving when using the Wheelman to crop
- Fixed a problem with customer and order color offsets not refreshing
- Allowed for negative offsets in saturation or sharpening
- Fixed a problem where ExportOrderItems ignores ProcessAfter scripts if the RImage output is selected
- Fixed a problem where doing Reset from within Color Balance was not handling angle adjustments properly
- Fixed a problem where the Products drop down did not display in order deliverables
- Fixed a problem where under certain conditions 'book' products did not show as 'books' in the workflow order item window
- Fixed a problem where the filter to View Image in Order Items was not working when there was no iprompt
- Fixed a couple statements for Database tracing
- Fixed a problem where doing a right click-> edit in an Order Items window would fail if the window had been opened from the images window
- When 'Set SubjectID for images based on Filename' is invoked, records in the order images data table are now successfully updated with subject IDs when filename matches are found
- Fixed a problem where setting the Workflow in the OrderItems window broke the tool tip display
- Changed the title of the Tracing dialog box from "Set Global Tracing Options" to "Global Tracing Options"
- Fixed a problem where STR ProductsOrderedForImageInNode() was wrongly respecting the Count when it should have been using the Quantity
- Fixed a long-standing issue where DP2 would appear to hang or was unable to close windows. The root cause of the problem was a counter exceeding allowed values after running the application for more than about 24 days.
- Fixed several bad error handling routines related to Green Screen
- Removed some redundant trace messages for ReturnOnSuccess() and ReturnOnFailure()
- Fixed a problem where "Show Value" in the Debugger hangs if the output is long
- Fixed a few cases where a destructor might not be called properly in the KPL language
- Fixed some bad characters in DefaultKeywords.txt

- Removed references to Animoto's discontinued B2B video creation service
- Made a change so that when selecting an order in the orders window where that order is part of a shoot, it will still open it in the comp job generator as if it were a shoot rather than a single order
- Fixed a problem where using built in image mastering with a local CD writer DP2 would attempt to start the wrong driver
- Fixed a problem where a missing translation was reporting itself right above "Existing Printer Configurations" in the configuration section of a windows printer in the printer setup window
- Fixed a problem reading meta-data from certain types of jpeg files (caused errors when running Export Images with certain images)
- Fixed a problem with the programmer's assistant not handling very large scripts.

Changes related to DP2 Catalogs (for labs using DP2 catalogs with other ordering systems)

- Allow multiple catalog products from a single dp2 product
- Removed SelectedNode, SelectedImageNode, and SelectedTextNode from the list of node choices for the Visual Effects on catalog products. (Since these effects are applied prior to sending the catalog product to the web server, the concept of a user selecting a node does not make sense.)
- Added a "Find File" button as a helper to the window where the values for render effect keywords are selected
- Fixed a problem with Option Driven Options. Disabling a Select One option wasn't choosing none as the next option choice.
- Fixed a problem with render effect images not being flagged as a product image like it should
- Changed catalog products and catalog option choices to have both a copy and a paste for render effects
- Allow operator to specify "per image" in the UOM drop down (except for shipping options)
- Added a button to view catalog product visual effects in a flash control
- Hid the retouch fields for order and shipping option choices since they are not supported for these types of options
- Allow the catalog product name field to open to a shorter length/view