"ImageMatch to DP2 Hot Folder"
"Auto Frames Module"
Reference Manual
Rev. 10.17.06

Installation:

There are no additional installation procedures for the "Auto Frames" module features. The new features are installed as part of the "ImageMatch to DP2" installation, if you purchased the "Auto Frames" on module.

Overview:

The "Auto Frames" module is designed to allow the user to automatically add Frames to image nodes in DP2 product layouts based on a Frame Code value in a specific ImageMatch export file column.

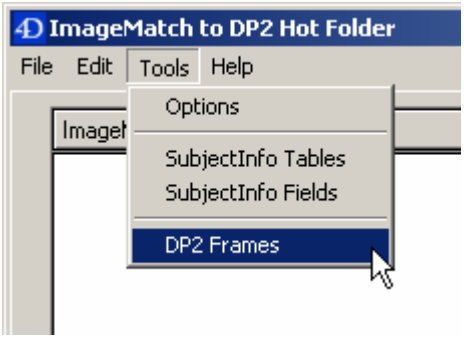
This feature is turned on by a new preference setting that will instruct "IM2DP2" to monitor a specific column name in the ImageMatch export file, and if there is a Frame Code value in that column for any row in the export file, the string that is located in the column will be used to lookup a matching value in a user enterable table of DP2 Frames.

If a matching record is found in the DP2 Frames records, all of the values in that record including the Frame Path, Frame Mask Path, etc. will be loaded from the table and inserted into the image node specified in the Options "DP2 Node Number" field so that a frame is added to that node in the product created, for all products ordered on that same row of the ImageMatch export file.

This allows for different rows to have different Frame Codes, or to have no Frame Code at all.

New Menu Bar Item:

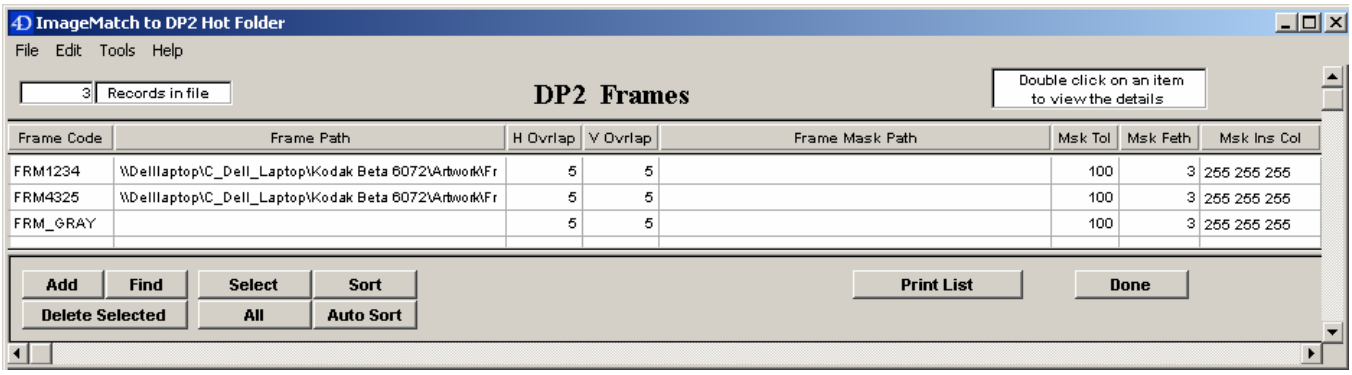
A new menu bar item has been added to the Tools menu.



"Tools / DP2 Frames Menu"

Click on the Tools menu and you will see the new "DP2 Frames" menu item.

When you select this menu item it will open the new “DP2 Frames” table list view shown below.



“DP2 Frames table list view”

It is in this table that you will enter the Frame Code data that will be used to apply frames to your DP2 order items created by ImageMatch to DP2 with the Auto Frames module.

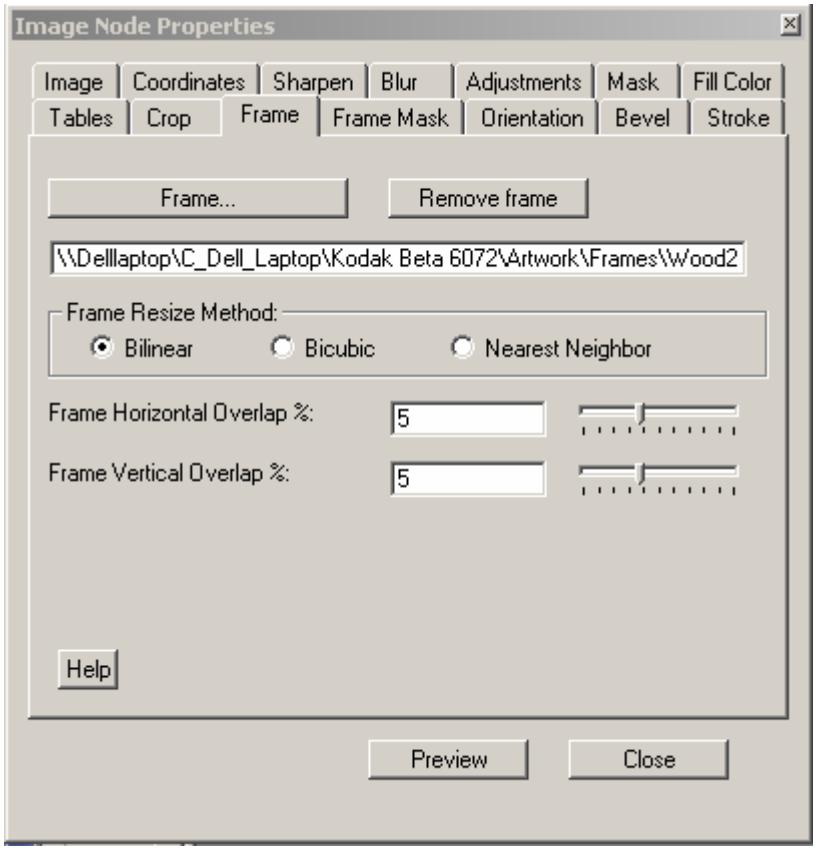
Fields in list view:
Frame Code
Frame Path
Frame Horizontal Overlap (“H Ovrlap” column Header)
Frame Vertical Overlap (“V Ovrlap” column Header)
Frame Mask Path
Frame Mask Tolerance (“Msk Tol” column Header)
Frame Mask Feathering (“Msk Feth” column Header)
Frame Mask Inside Color (“Msk Ins Col” column Header)
Make Grayscale (“Grayscale” column Header)

The “Frame Code” field is where you will enter an alpha numeric string that will be used to insert in the ImageMatch export file column for each row that you wish to have that frame added to the products ordered. It should not contain any spaces, and can be all alpha, all numeric, or a combination of both, and is limited to a maximum of 50 characters. (Note: Only one frame code is allowed per line in the ImageMatch export file)

The “Frame Path” field is where you will enter the UNC path to the Frame image file that you wish to have applied when the associated Frame Code is entered in the ImageMatch export file column. This would be similar to choosing a frame file in the DP2 Image Node Properties window when you want to add a Frame to a node.

The “Frame Horizontal Overlap” field is where you will enter the % of Frame overlap in the horizontal direction. This would be the same value that you would enter in the “Frame Horizontal Overlap %” field on the “Frames” tab of the DP2 “Image Node Properties” window for a specific image node. (Valid range of -50 to 100 with default value of 5)

A screen shot of the DP2 “Image Node Properties” window is shown below with the “Frame” tab selected.

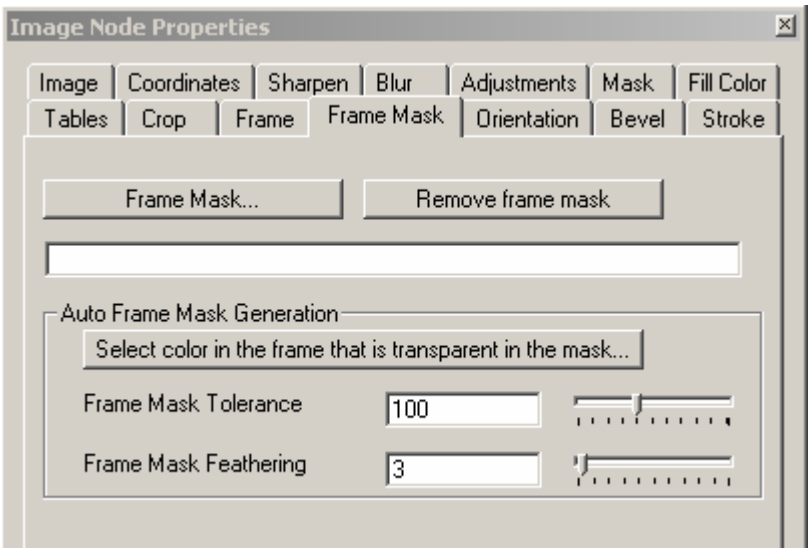


"Frames tab" of DP2 Image Node Properties window

The "Frame Vertical Overlap" field is where you will enter the % of Frame overlap in the vertical direction. This would be the same value that you would enter in the "Frame Vertical Overlap %" field on the "Frames" tab of the DP2 "Image Node Properties" window for a specific image node. (Valid range of -50 to 100 with default value of 5)

The "Frame Mask Path" field is where you will enter the UNC path to the Frame Mask file that you wish to have applied to the Frame file if the frame you are using requires a mask file. This would be similar to choosing a Frame Mask in the DP2 Image Node Properties window when you want to add a Frame Mask to a node. This field may not have an entry if you are using DP2's standard frame files.

A screen shot of the DP2 "Image Node Properties" window is shown below with the "Frame Mask" tab selected.



"Frame Mask tab" of DP2 Image Node Properties window

The "Frame Mask Tolerance" field is where you will enter the same value that you would enter in the "Frame Mask Tolerance" field on the "Frame Mask" tab of the DP2 "Image Node Properties" window for a specific image node. (Valid range of 0 to 255 with default value of 100)

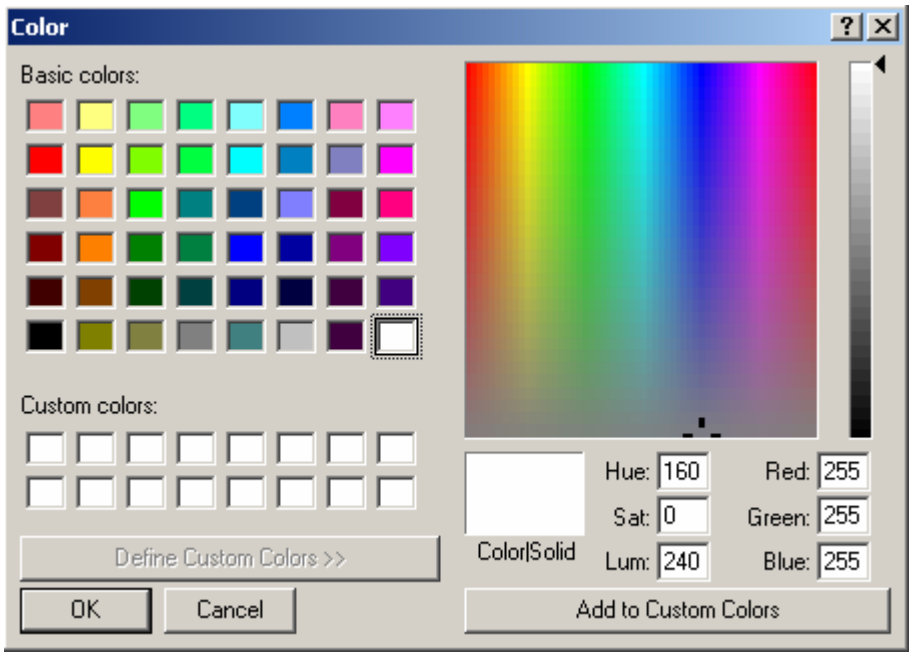
The "Frame Mask Feathering" field is where you will enter the same value that you would enter in the "Frame Mask Feathering" field on the "Frame Mask" tab of the DP2 "Image Node Properties" window for a specific image node. (Valid range of 0 to 100 with default value of 3)

The "Frame Mask Inside Color Red" field is where you will enter the same value that you would enter in the "Red" field of the "Colors" window that is opened from the "Frame Mask" tab of the DP2 "Image Node Properties" window for a specific image node. (Valid range of 0 to 255 with default value of 255)

The "Frame Mask Inside Color Green" field is where you will enter the same value that you would enter in the "Green" field of the "Colors" window that is opened from the "Frame Mask" tab of the DP2 "Image Node Properties" window for a specific image node. (Valid range of 0 to 255 with default value of 255)

The "Frame Mask Inside Color Blue" field is where you will enter the same value that you would enter in the "Blue" field of the "Colors" window that is opened from the "Frame Mask" tab of the DP2 "Image Node Properties" window for a specific image node. (Valid range of 0 to 255 with default value of 255)

A screen shot is shown below of the Frame Mask Inside "Colors" window that gets opened when you click the "Select color in the frame that is transparent in the mask…" button on the "Frame Mask" tab.



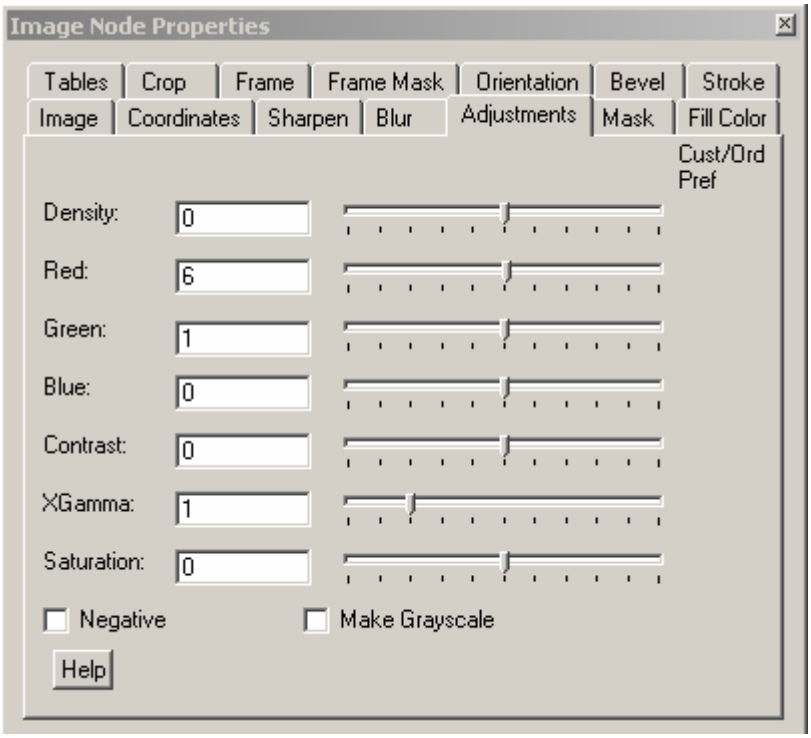
"Mask Inside Colors window" of DP2 Image Node Properties window

The values entered in the Frame Inside Mask Color fields of the "DP2 Frames" record will be combined to make up the string value that will show up in the Job Script for the Order Item record created in DP2 and will look something like the following:

FrameMaskInsideColor: 0 255 255 255

The "Make Grayscale" field is a checkbox field that you will check or uncheck the same as you would set the "Make Grayscale" field on the "Adjustments" tab of the DP2 "Image Node Properties" window for a specific image node. (Note: This is not a Frame related setting, but was added as part of this new module since it will be initiated by a Frame Code in the ImageMatch export column. So it is possible to have a Frame Code that designates adding a Frame and converting the Image to Grayscale, or simply to use a Frame Code for making the image Grayscale without a Frame.)

A screen shot is shown below of the "Adjustments" tab of the DP2 "Image Node Properties" window, with the "Make Grayscale" checkbox at the bottom of the screen.

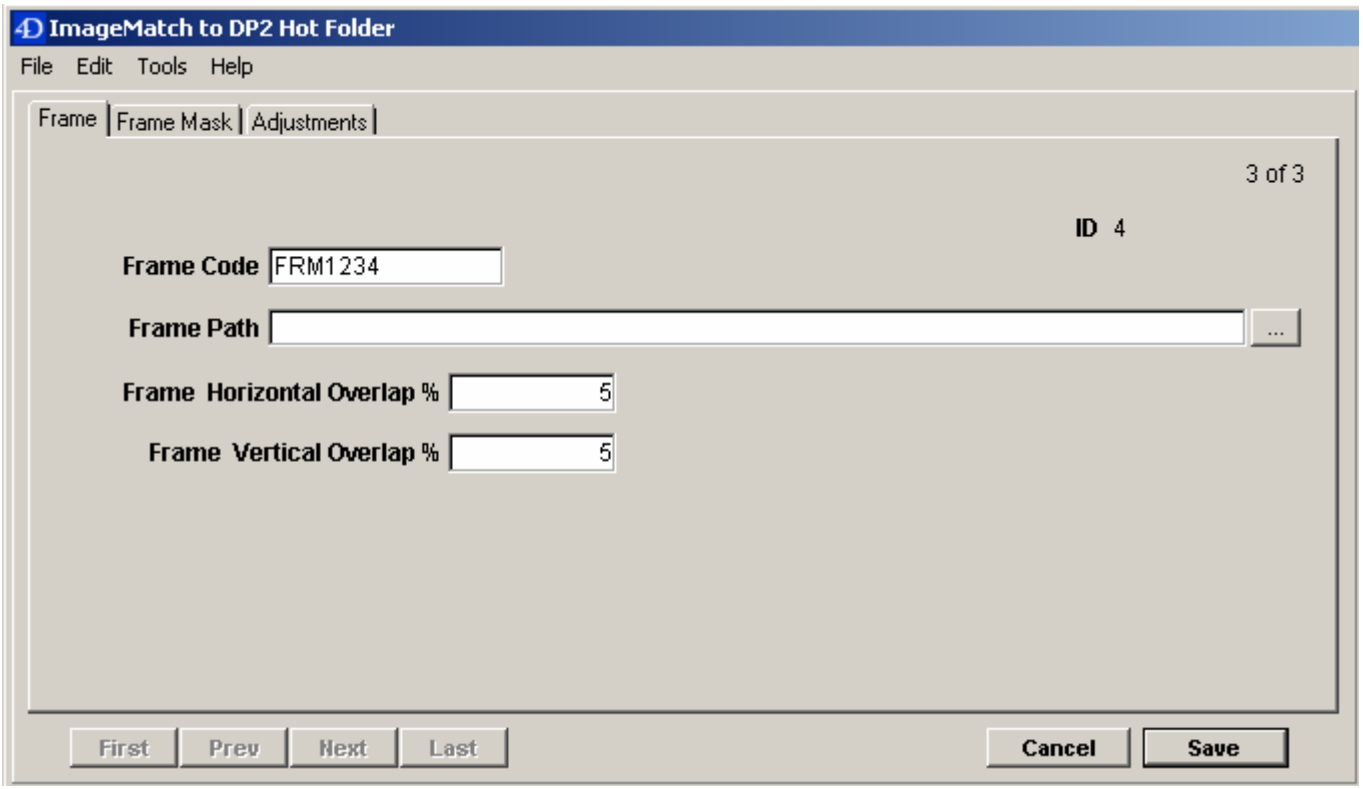


"Adjustments tab" of DP2 Image Node Properties window

Adding Frame records:

To add a new Frames record, click the "Add" button that is located in the bottom left portion of the DP2 Frames list view window.

This will open the "DP2 Frames Input" window shown below.



"Frame Tab" of the "DP2 Frames Input" window

The New "DP2 Frames Input" window has three tabs at the top (Frame, Frame Mask, and Adjustments). The window opens with the "Frame" tab selected.

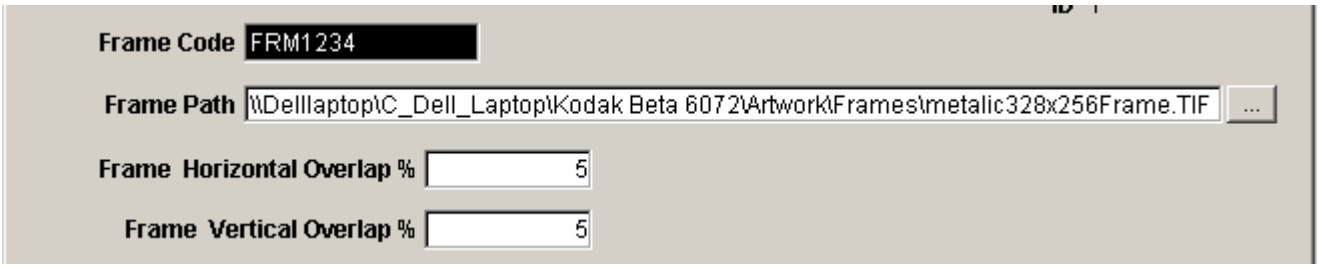
Enter the "Frame Code" for this record. In our example, we entered "FRM1234".

Next you will enter the "Frame Path" field. This can be done by typing the full path into the field or by clicking on the browse button that is to the right of the field and labeled " … ". We recommend that you use the browse button which will open an explorer find file window and point to the frame file you wish to choose, and will eliminate typing errors.

If you do type into this field, when you tab out of the field, the path that remains will be verified to make sure it is a valid path.

When you click the browse button, it is important to use the entire network to locate your frame file so that DP2 can resolve the path when we include the Frame path information in the order item we create in DP2.

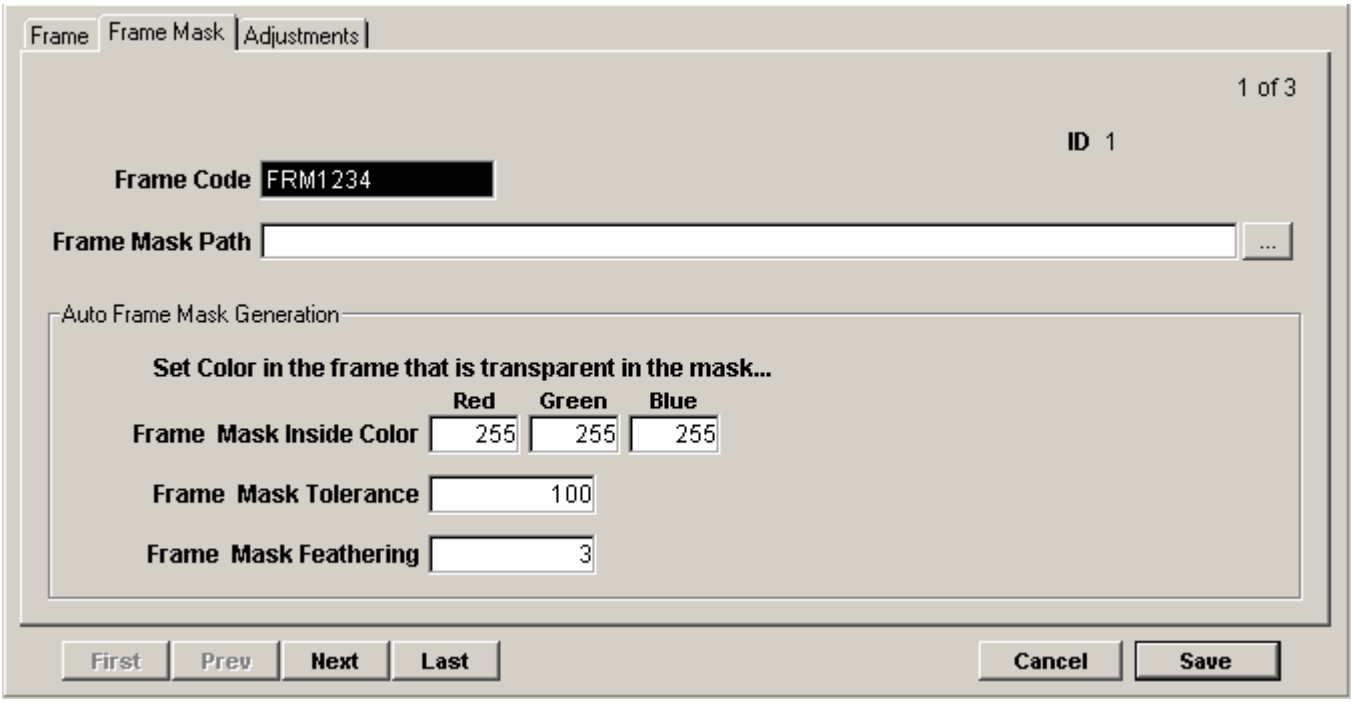
Once you have selected a frame file in the explorer window opened by the browse button you will see a full UNC path in the Frame Path field as shown below.



"Frame Path field" with UNC path

You can see in our example above that a new record will default to values of 5 in both the "Frame Horizontal Overlap %" and the "Frame Vertical Overlap %". You should adjust these values if you wish to use different values than the defaults.

Click on the "Frame Mask" tab for Frame Mask related settings.



"Frame Mask Tab" of the "DP2 Frames Input" window

If the frame you are using requires a Frame Mask, you will click on the browse button to the right of the "Frame Mask Path" field and point to the mask file wherever it is stored on your network. Once again you should browse to the Entire Network to select the file so that a UNC path will be loaded.

In our example above we did not have a Mask file for this frame and so that field is left blank.

You can see in our example above that a new record will default to values shown above for all the fields in the "Auto Frame Mask Generation" group box area. You should adjust these values if you wish to use different values than the defaults.

Click on the “Adjustments” tab for the Make Grayscale setting.

“Adjustments Tab” of the “DP2 Frames Input” window

If you wish to have the Image Node converted to Grayscale, then check the “Make Grayscale” checkbox. In our example for Frame Code “FRM1234” it is not checked so the Image will not be modified.

Once you have completed the data for this record, click the “Save” button to save the record.

This will return you to the list view of the table, and you can repeat the process to add additional DP2 Frames records.

If you wish to modify an existing record, simply double click on the item in the list view and this will open the Input view of that record, and you can make any modifications and then save your changes by clicking the Save button.

To return to the application main window, simply click on the “Done” button at the bottom right of the DP2 Frames list view window.

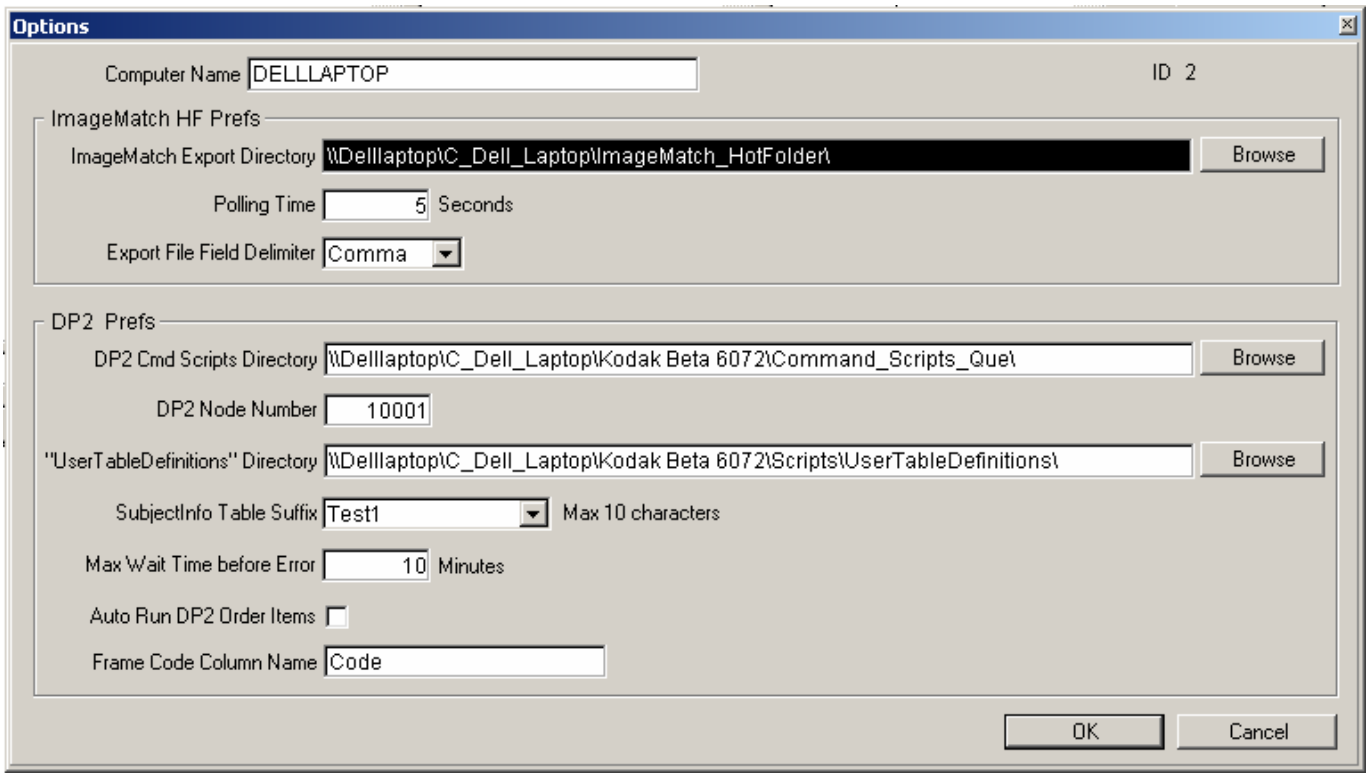
We recommend starting out with just a few entries to do your initial testing, and then once you are familiar with the entire process and how it works, then you can continue entering the remaining Frames records.

New Options Field:

To activate “Auto Frames” functionality, you will need to determine what column you are going to use in the ImageMatch export file to pass the Frame Code information. This should be a column that will not contain any other information coming from ImageMatch. In our example, we used the “Code” column, but that may not work in your current lab workflow.

Once you determine the column name that you will be using, you will need to enter that column name in a new field on the “Tools / Options” window.

This new field can be found at the bottom of the DP2 Prefs section of the Options input window.



"Options input window with new Frame Code Column Name field"

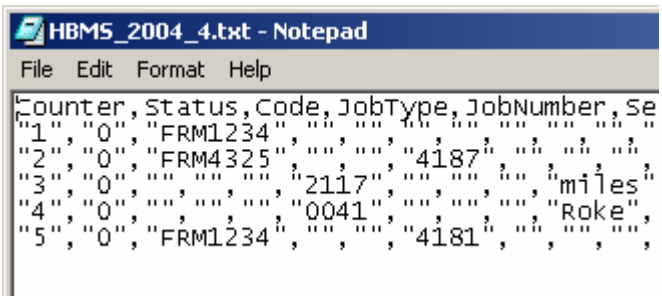
Enter the column name exactly as it appears in the ImageMatch export file in the new "Frame Code Column Name" field. We have chosen the "Code" field for our example.

Save your changes to the Options by clicking the "OK" button, which will return you to the application main window.

Create a Test Export File:

In order to test this new feature, you can modify an existing ImageMatch export file by entering some of your "DP2 Frames" Frame Codes in a few of the rows in the column that is associated with the "Frame Code Column Name" entered in the Options window.

A portion of our example ImageMatch export file is shown below.



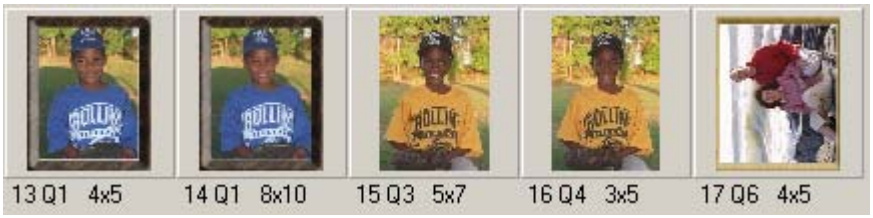
"ImageMatch export file with Frame Codes"

As you can see in the example above, there are five rows of data and only three of them have Frame Codes entered in the "Code" column.

If you are using Tab delimiters, your export file will look differently, as our example is Comma delimited.

Once you have modified your ImageMatch export file, you are ready to test the new "Auto Frames" functionality by placing the export file in the "ImageMatch Export Directory" that our application is monitoring for new orders to be processed.

Once the order is processed into DP2, you will be able to see your Order Items with Frames added as shown below.



"DP2 Order Items with frames added"

In our example order, we only had Frame Codes in three of the five rows of the export file. As you can see in the graphic above, two order items have a dark wood frame, one has a light wood frame, and two have no frames at all.

It is important to remember that if a Frame Code is found in the designated Column of an export file, that every product ordered in that same row of the export file that has a quantity of one or greater, will have the same frame added.

Once you have tested this new feature, you are ready to continue adding additional "DP2 Frames" records and perform further testing.

Important Note:
It is advisable to test each new frame with all DP2 products that will be ordered in the ImageMatch export file before running production work for your customers.

Applying Auto Frame effects to Multi-Node Products:

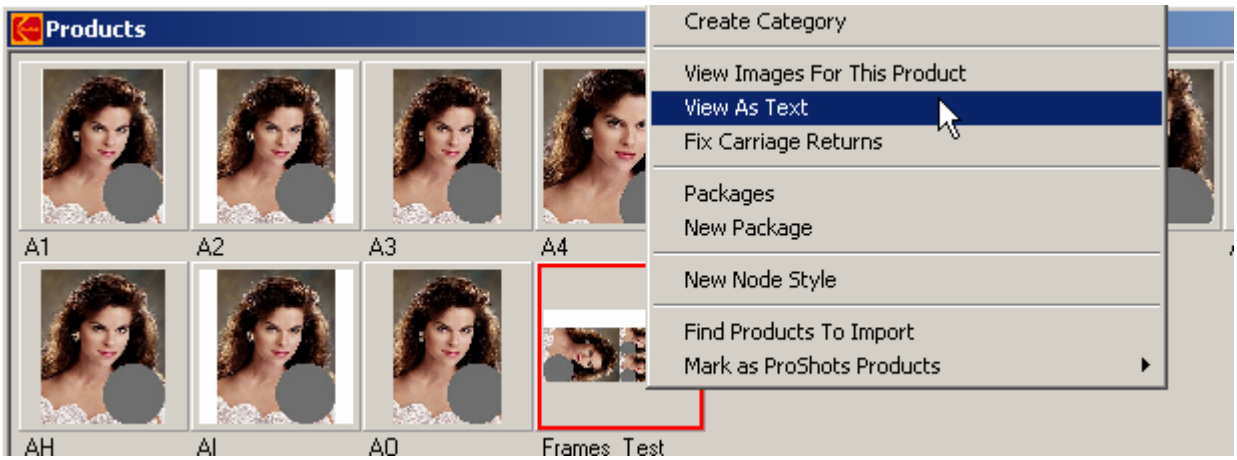
If you have products with multiple image nodes such as a combination print with 1-5x7 & 2-3x5's where the image nodes are not the same aspect ratio, then DP2 will not allow you to copy pixels from the first node (the 5x7) to the other two nodes (the 3x5's).

You can cheat and type in the CopyFrom: keyword and value in the layout and force DP2 to use the first node after all rendering is complete for that node and all of its features. However, if a frame is applied it will become distorted when the pixels from the first node are copied into the 3x5 nodes.

So in order to allow you to accomplish the result you want, we have taken advantage of a feature that is not currently documented in DP2, but will continue to be a part of future releases.

In order to have the same keywords and values for the Frame Codes you setup in the DP2 Frames table of 'ImageMatch to DP2' applied to additional nodes other than the node number specified in the "DP2 Node Number" field on the Options window, you will have to open each layout that has multiple nodes and modify the layout script.

To do so, right click on the Product in the DP2 Products table that you want to modify and select the "View As Text" contextual menu item as shown below.



"View As Text" contextual menu in DP2 Products table

This will open the Product Layout script in Notepad as you have probably done many times before.

Then you will need to find the first Image Node that you wish to have the Auto Frames effects applied to other than the "DP2 Node Number" in the Options setup of IM2DP2.

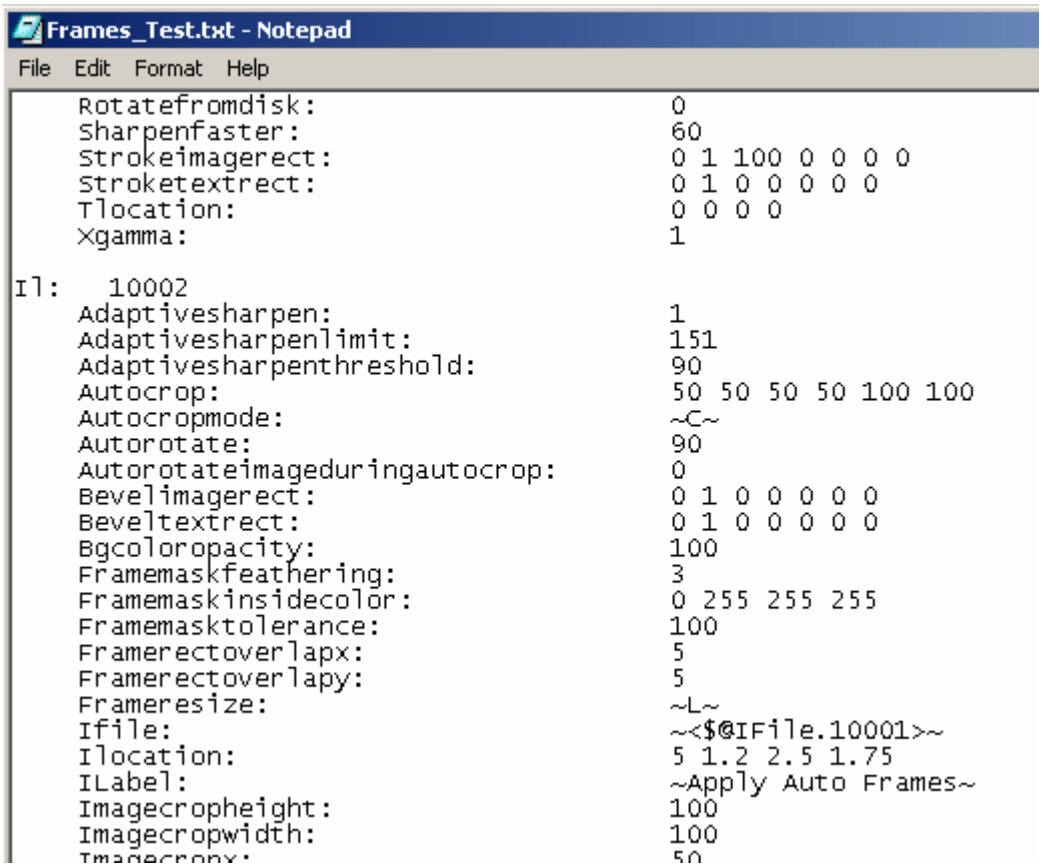
In our example, the first Image Node is node 10001. IM2DP2 will apply the Auto Frames effects keyword to this node automatically, so we do not need to modify it.

However, the next node, which is node 10002, is the first node we need to modify to flag it as a node that we need to apply the same affects to. In order to do that you will need to type in the following keyword followed by a non-null string value:

Example:
ILabel: ~Apply Auto Frames~

This line can go anywhere in the node keywords, so you can place it wherever is most convenient for you. We do recommend you place it in the same location in each node so that if you have to go back to debug a layout problem, you know where to look for it the next time. This is just a suggestion but it makes for good operational protocol to be consistent when you are manually modifying scripts, since the keyword "ILabel" is not documented and most likely will not be modified by DP2's script generation.

Once you insert the line in the layout script it will look something like the screenshot below.



"DP2 Product layout script" with "ILabel" keyword line inserted

As you can see we inserted our line just after the keyword "Ilocation:".

In our example layout we have three other nodes that we want the same Frame effects applied to so we will repeat the above procedure for each of those nodes, 10003, 10004, and 10005.

After importing our sample ImageMatch export file using the "ImageMatch to DP2" importer, we can see that the same frame and effects was applied to our multi-node layout.

In our example below, we not only added a frame to each node but we also set the image to Grayscale. This was accomplished by setting up a DP2 Frames code that not only had a Frame Path but also had the Make Grayscale checkbox checked on the "Adjustments" tab of the DP2 Frames input screen.

"DP2 Multi-Node Product" with Frames and Make Grayscale applied

In our example layout script we used the following line to demonstrate how it works:

ILabel: ~Apply Auto Frames~

The same results will occur as long as the string between the tildes (~~) is not a null string as shown below.
Example of null string:
ILabel: ~~

So this means you can put whatever words between the tildes that you prefer to activate the Auto Frames effect, but if you insert the ILabel keyword with a null string value it will have no effect on that node.

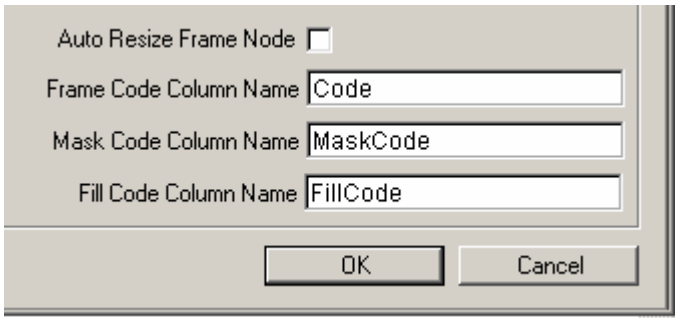
It is best to not have the product open in design view when you are modifying the layout script, because if you modify the script with the product open you may think you have saved the changes by saving the layout script, but when you close the product from the design view, you could override your changes by closing it incorrectly.

Important Note: Using the ILabel keyword to copy the Auto Frame effects to other nodes does not copy any other keyword values from the first node. Due to this fact, any cropping, or other adjustments applied in ImageMatch will only be applied to the first node.

Auto Frame Resize Feature

The Auto Frame Resize feature is designed to provide a method for having IM2DP2 automatically resize the image node having Auto Frames applied so that it is reduced in size the exact amount to allow the frame to be moved to the outside of the image node but still fit within the original image node size location.

If the Auto Frame Resize module is installed, you will see a new field on the Main tab of the Options dialog.



New "Auto Resize Frame Node" checkbox on Options dialog

If the "Auto Resize Frame Node" checkbox is checked, then IM2DP2 will use the values entered in the new [DP2_Frames] table fields that are related to the Frame File size to resize the image node and place the frame on the outside of the resized image node.

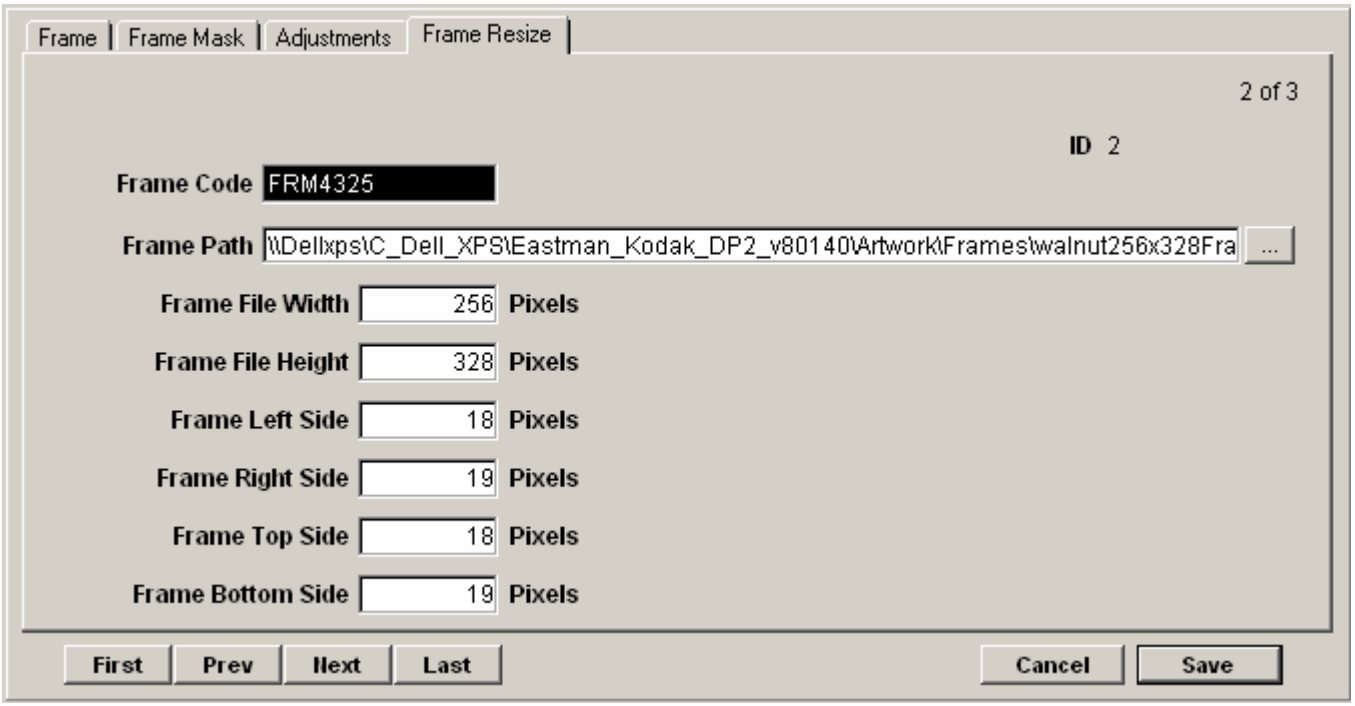
If the "Auto Resize Frame Node" checkbox is not checked, then IM2DP2 will use the normal Auto Frames behavior and simply apply the Frame Horizontal Overlap and Frame Vertical Overlap field values from the [DP2_Frames] table.

New [DP2_Frames] table fields

New fields have been added to the [DP2_Frames] table that will need to be entered for each frame that you are using with the Auto Frames feature.

When you open a [DP2_Frames] record input window, you will see a forth tab added to the window: "Frame Resize".

Click on the "Frame Resize" tab and you will see the new fields.



New "Frame Resize" tab on the [DP2_Frames] input form.

"Frame File Width" field is where you will enter the Width in pixels of the frame file that is entered in the "Frame Path" field. In our example the frame file is "walnut256x328Frame.tif". This file has a width of 256 pixels so that is what we have entered.

"Frame File Height" field is where you will enter the Height in pixels of the frame file that is entered in the "Frame Path" field. In our example the frame file has a width of 328 pixels so that is what we have entered.

"Frame Left Side" field is where you will enter the width in pixels of the left side of the frame file graphic, starting at the edge and going up to where the graphic ends and white space begins.

"Frame Right Side" field is where you will enter the width in pixels of the right side of the frame file graphic, starting at the edge and going up to where the graphic ends and white space begins.

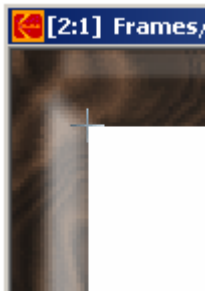
"Frame Top Side" field is where you will enter the width in pixels of the top side of the frame file graphic, starting at the edge and going up to where the graphic ends and white space begins.

"Frame Bottom Side" field is where you will enter the width in pixels of the bottom side of the frame file graphic, starting at the edge and going up to where the graphic ends and white space begins.

To demonstrate one way to do this we have opened the Frame Image in DP2.

Frame File opened in DP2

To measure the Left and Top sides we first used the magnifier tool to enlarge the image so that we can be more precise. Next we used the Crop tool to place the cursor in the top left corner where the frame ends and the white space begins.



Measuring Frame Left Side and Top Side

When you look at the bottom of the window you will see the X and Y coordinates in pixels.

X and Y coordinates of the cursor position

In our example, X=00018 and Y=00018.

So we have entered 18 in the “Frame Left Side” field and 18 in the “Frame Top Side” field.

To measure the Right and Bottom sides we first used the magnifier tool to enlarge the image so that we can be more precise. Next we used the Crop tool to place the cursor in the bottom right corner where the frame ends and the white space begins.

Measuring Frame Right Side and Bottom Side

When you look at the bottom of the window you will see the X and Y coordinates in pixels.

X and Y coordinates of the bottom right cursor position

In our example, X=000237 and Y=00309.

To calculate “Frame Right Side” subtract the Y position from the width of the frame file.

The frame file width is 328 pixels.

Frame Right Side = 328 - 309 or 19 pixels.

So we have entered 19 in the “Frame Right Side” field.

To calculate “Frame Bottom Side” subtract the X position from the height of the frame file.

The frame file height is 256 pixels.

Frame Bottom Side = 256 - 237 or 19 pixels.

So we have entered 19 in the “Frame Bottom Side” field.

You could accomplish the same results by opening your frame image file in Photoshop with the unit of measure set to pixels, but you should use whatever is easiest for you.

As you can see in our example, not all four sides of the frame are the same width and that is why we need you to enter separate values for each side if our calculations are to work correctly.

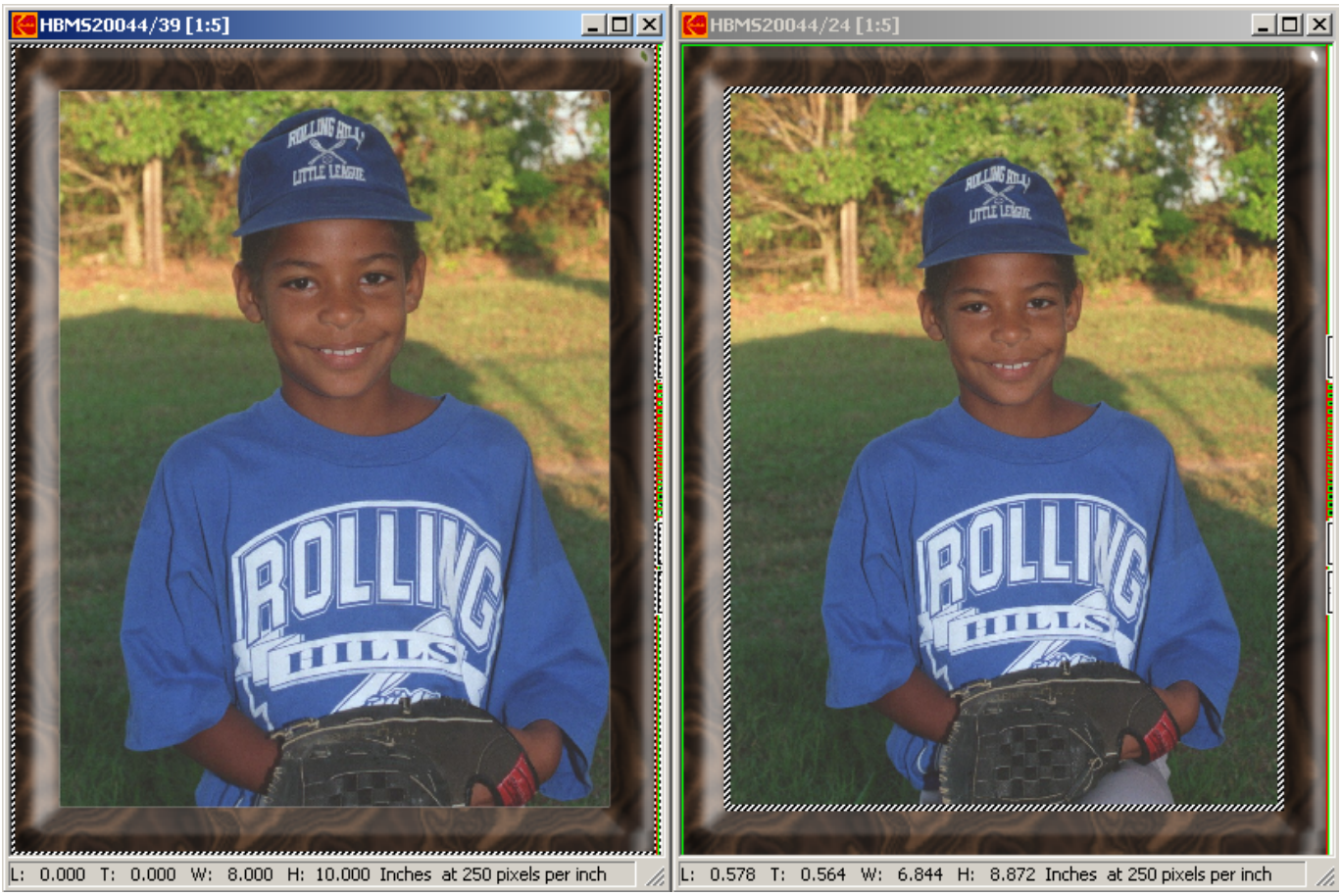
Once you have entered all the field entries on the new Frame Resize tab of the [DP2_Frames] input form, click the "Save" button to save your modified data. If you click the Cancel button, your entries will not be saved.

Repeat this procedure for each [DP2_Frames] record as well as any new Frames records you add before you use the new feature.

Testing your Data

Once you have entered all of the "Frame Resize" tab data for all of your frames, go to the Options dialog and check the "Auto Resize Frame Node" checkbox, then run a test ImageMatch export file that contains Auto Frames orders.

To compare the difference, run the same test order with the "Auto Resize Frame Node" checkbox unchecked and then compare the same order items.



Comparing same Order Item with feature On and Off.

In our example above the image on the left was created with the Resize feature turned OFF and the one on the right was created with the Resize feature turned ON.

If you get some unexpected results, the first thing to look at is your measurements you entered in the new DP2_Frames fields. If you entered inches instead of pixels, our calculations will not work.

Customized DP2 "Cmds.txt" Required

IMPORTANT: As of DP2 version 8.0.166, there was a bug in the script "Cmds.txt" that prevented the use of the "Function" parameter in command importer scripts, so we must modify your copy of "Cmds.txt" until Kodak releases a release of DP2 that includes the fix.

Support Contact Information:

If you have any questions about the "ImageMatch to DP2" application or need assistance during installation or configuration, please call or email Chuck Morris at Impossible Solutions, Inc.

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Wk: 407-884-9666
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