"PicPro to NHF Hot Folder"
Application Reference
Rev. 08.02.06

Install Files:

There is only one file involved with installing the "PicPro to Noritsu Hot Folder" application.

The installer file is named "PicPro_2_NHF_1.x.x.EXE".

Simply double click on this executable and the application files will be installed on your computer and a new program group will be added to your Start / Programs menu.

Once the installation is complete, you should see the new program group in the Start / Programs menu, "PicPro to NHF".

QuickTime 2.5 or later is required:

This application uses QuickTime to aid in getting image information about the files that are rendered by PicPro.

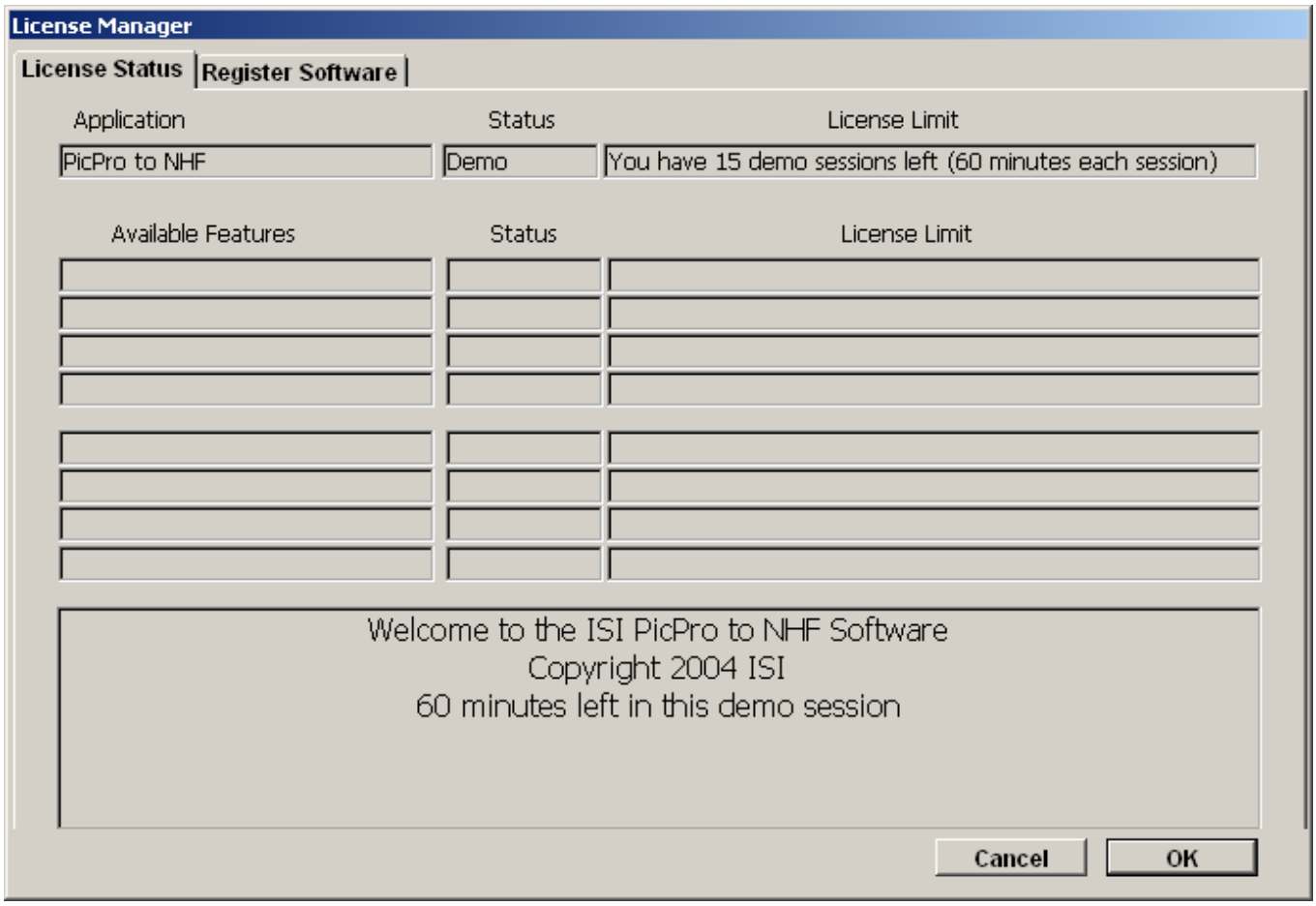
Therefore, we must have QuickTime 2.5 or later installed on the same machine that the "PicPro to NHF" application is installed on or the application will shut down when it is launched.

If you do not know if QuickTime is installed on your computer, we have included an installer for QuickTime 6.0 in the "PicPro to NHF" program group shown above. Launch the installer and simply follow the prompts and QuickTime will be installed.

Once the QuickTime installation is complete, you are ready to start the "PicPro_to_NHF" application.

Demo Version Startup

If this version of "PicPro to NHF" is a Demo version, it will launch 15 times and run for 60 minutes each time it is launched. At the end of each 60 minute session the application will shut down automatically. After 15 launches you will no longer be able to run the software until it is registered to a specific computer for a specific trial period, or is purchased and registered with an unlimited license key.
When the application starts up in **Demo** mode you will see the following screen:



"Demo License Manager screen, License Status tab"

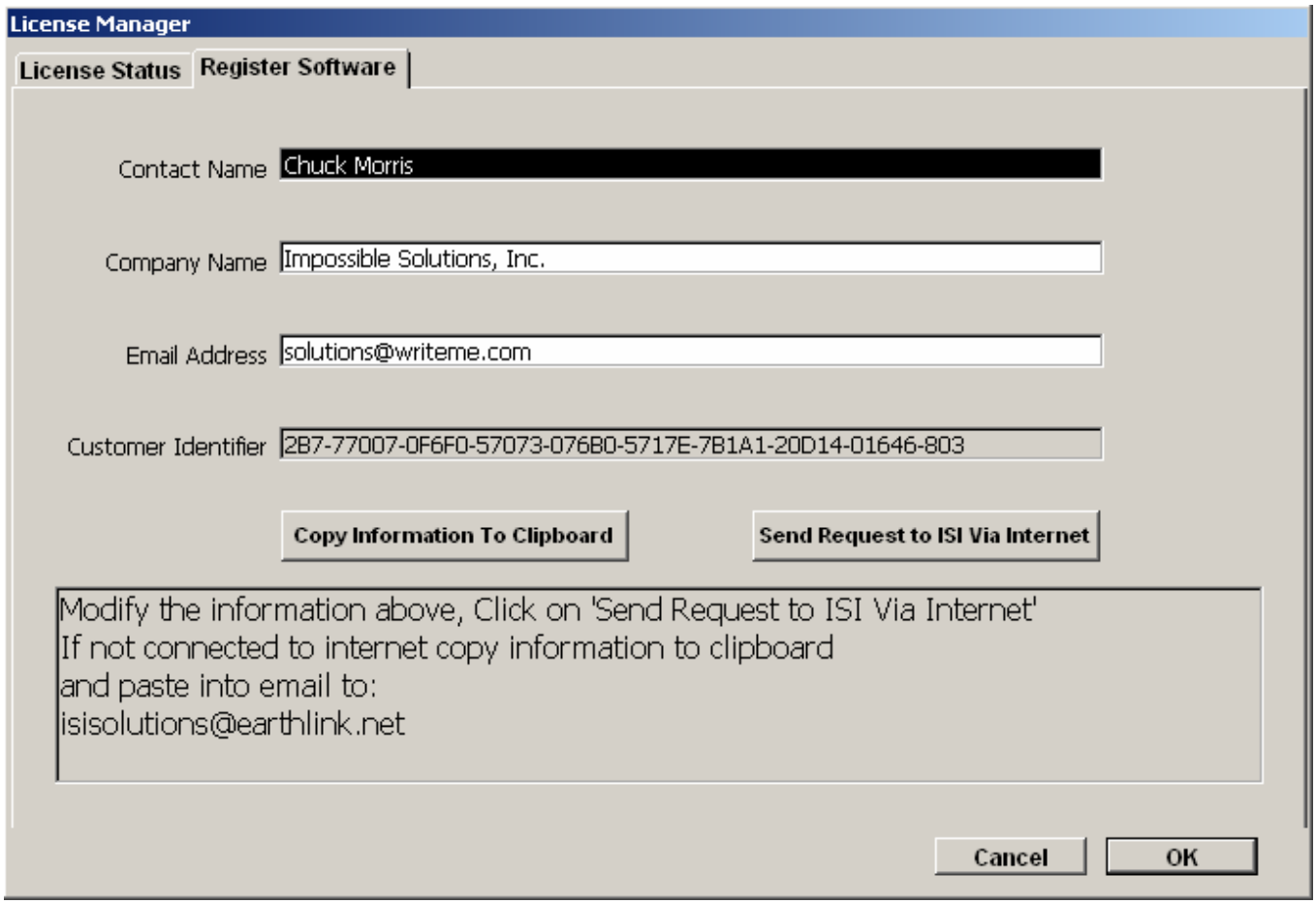
The License Status tab will show the Application name, Status, and License Limit information. The screen above shows the information that will be displayed the first time you launch in Demo mode.

Click the OK button and "PicPro to NHF" application startup will continue.

Registering the Software

(You can skip this section for now, but it is here for your future reference, once the Demo period expires.)

If you decide to purchase the software or register it for a specific trial period, the license manager allows you to register the software on a specific workstation. To do so, click the "Register Software" tab and you will see the following screen.



"Register Software" tab of license manager

IMPORTANT: Please make sure that you are running the application on the workstation that you wish to register it for before you proceed with the information on the Register Software tab, as the Customer Identifier field data includes information related to the computer workstation.

Contact Name is the first field, and should contain the main contact person's name from your company.

Company Name field is for entering the name of your company.

Email Address field is where you enter the email address that you wish to have the license key information sent to.

Once all the fields are completed, you have two options for sending the registration information to Impossible Solutions.

1. If you are connected to the internet and have outgoing access to the Web, you can click the **"Send Request to ISI Via Internet"** button. This will send an email to ISI with your registration information.
2. If you do not have internet access from this workstation, you can click the "Copy Information to Clipboard" button and then paste the information into a text document. Then move the text document to a workstation that does have internet access, copy the text into the body of an email, and send the email to isisolutions@earthlink.net.

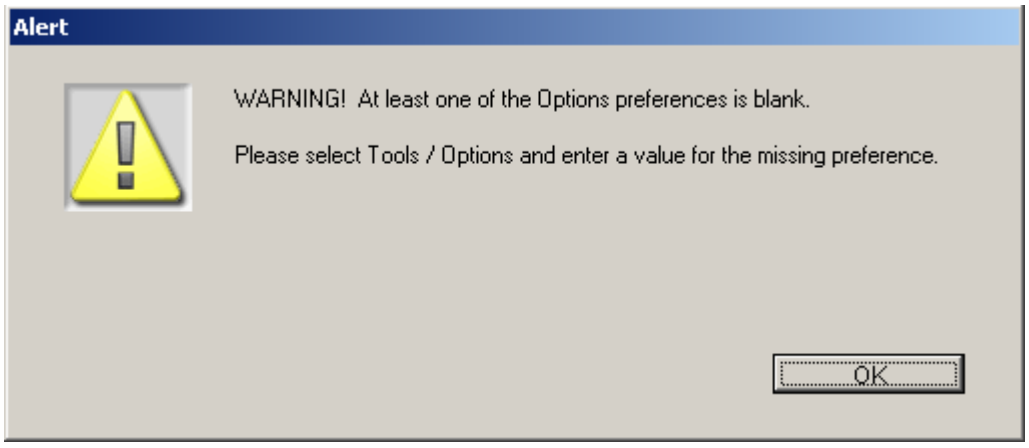
ISI will process the registration information and send you an email with an attached license key file and instructions as to where it should be placed in the application directory structure to activate your license.

This is a manual process at this time, so don't be surprised if it takes some time for the license file to be returned.

Start the Application:

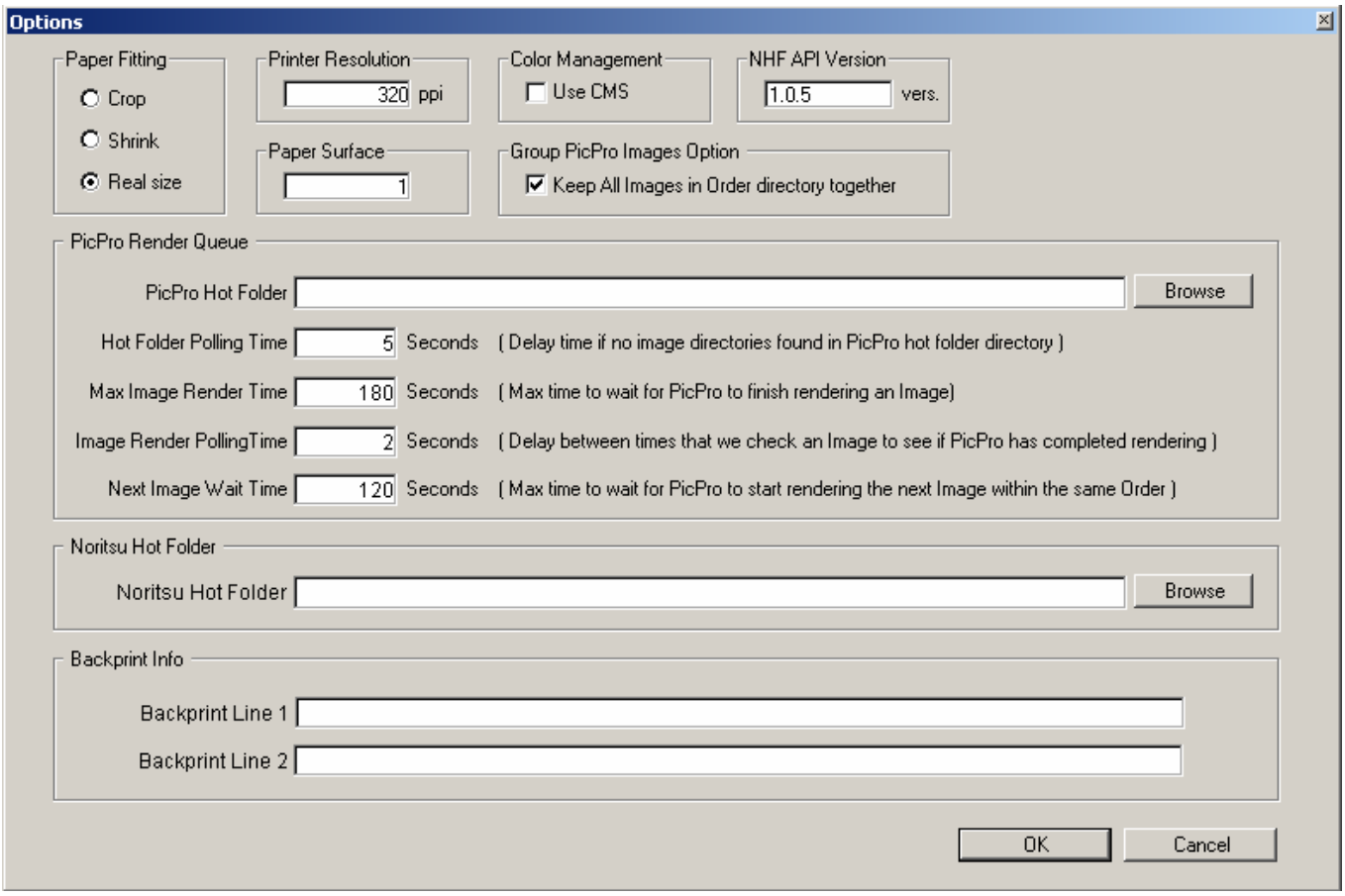
To start the application, click on the "PicPro_to_NHF_v1.x.x" icon under the "PicPro to NHF" group as shown above.

When you start the "PicPro to NHF" application the first time you will see this alert message, which is letting you know there are some preferences that must be setup before running the application.



"Warning message" concerning missing preferences

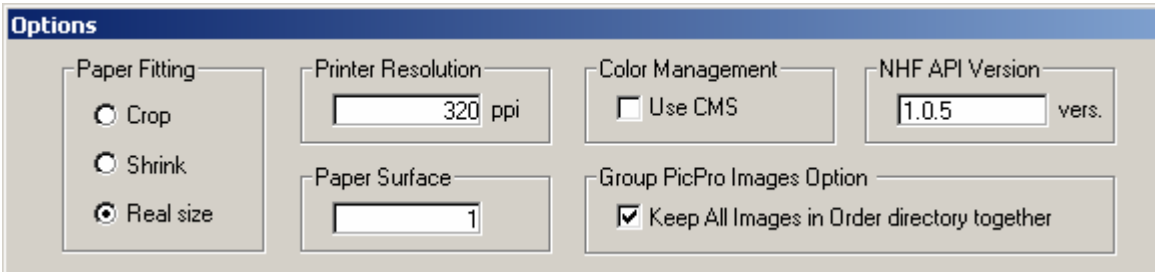
Click the OK button and the following screen will open.



"Options Dialog screen" for entering application preferences

This is the Options dialog that allows you to enter the required preferences for the application. Most of the preferences relate to Noritsu Hot Folder settings, and a some deal with the PicPro information.

The options at the top of the window are shown below:



"Options Dialog screen" top section

These settings relate to your Noritsu Hot Folder application and printer.

If you are not sure what to use, set the **Paper Fitting** setting to "Real size" which is the default setting.

Printer Resolution should be set to match the pixels per inch resolution of the Noritsu printer you will be sending the work to be printed on. Here we have it set to 320ppi which is the resolution of certain Noritsu QSS printers.

Paper Surface should be set to a value in the range of 1 to 4 depending on what you are using in your printer. If you are unsure, use "1" for now.

Color Management should be set according to your preferences. The default setting is to have the "Use CMS" checkbox unchecked.

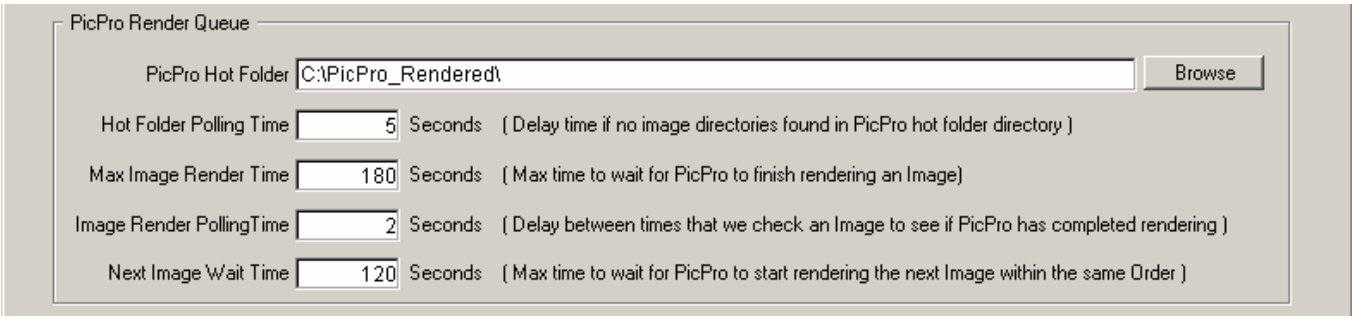
NHF API Version only has two options for now that are acceptable: ("1.0.3" or "1.0.5") Unless you have a QSS printer that has the special 1.0.5 version of the NetOrder API installed on it, you should set this setting to "1.0.3".

Important: This field must be set correctly or numerous errors will occur in Noritsu Hot Folder. If you start getting "Invalid Request ID" errors in NHF they may be caused by this field being set incorrectly.

Group PicPro Images Option should be set according to your preferences. The default setting is to have the "Keep All Images in Order directory together" checkbox checked. When checked, if there are more than one image rendered into the same Order directory by PicPro, the application will keep them all together in on NHF Order directory and Cmd file.

NOTE: The preferences in the next section of the dialog will affect how the grouping of images operates, so you may have to use trial and error to get the proper settings based on the speed with which PicPro completes rendering images.

The next section of options deals with the PicPro render queue path and timing settings such as how often you want the application to poll that directory for available images to print, etc.



"PicPro Render Queue preferences" on Options window

PicPro Hot Folder:
When you created your PicPro products to be rendered to disk, you specified a Hot Folder name and location that you wanted PicPro to render the images into.

PicPro then creates OrderID directories inside that hot folder and renders the images for that OrderID inside the OrderID directory.

The directory that you want to point to here is the Hot Folder directory that all the OrderID directories get created inside of.

In our example it is simply a directory named "PicPro_Rendered" but yours will most likely be something else.

Click the Browse button to locate the directory and select it and the full path will be copied into this options field.

Hot Folder Polling Time is by default set to 5 seconds, but you may adjust this later to get different results. This sets the delay time that the "PicPro to NHF" application waits before checking the PicPro Hot Folder for images if none are found. It also determines how often the lists of files on the main screen of the application are updated.

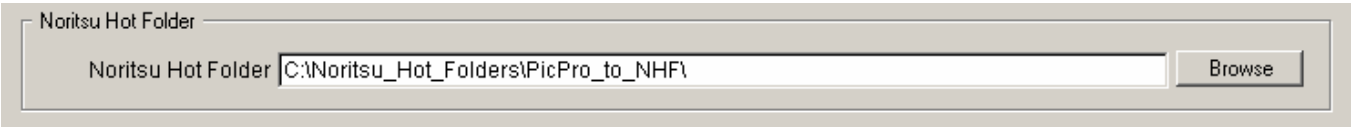
Max Image Render Time is by default set to 180 seconds (3 minutes), but you may adjust this later to get different results. This sets the maximum amount of time that the "PicPro to NHF" application waits for PicPro to finish rendering a single image. You should do some testing with this setting since if it is set for too much time it will slow down the process of completing sending an order to the NHF application for printing. However, if it is set to a time that is too short, meaning less time than PicPro can render an image of average size, the "PicPro to NHF" application will return an error message and stop processing the order.

Image Render Polling Time is by default set to 2 seconds, but you may adjust this later to get different results. This sets the amount of time that the "PicPro to NHF" application waits in between attempts to determine if PicPro to finish rendering a single image by checking to see if the size of the image has changed. You should do some testing with this setting since if it is set for too much time it will slow down the process of completing sending an order to the NHF application for printing. However, if it is set to a time that is too short, it will simply check the image size more often.

Next Image Wait Time is by default set to 120 seconds (2 minutes), but you may adjust this later to get different results. This sets the maximum amount of time that the "PicPro to NHF" application waits for PicPro to start rendering a new image in the same Order directory as the last image rendered. You should do some testing with this setting since if it is set for too much time it will slow down the process of completing sending an order to the NHF application for printing. However, if it is set to a time that is too short, meaning less time than it takes PicPro to start rendering the next image, the "PicPro to NHF" application will end up breaking the same Order directory into multiple NHF Orders.

NOTE: The last three time settings have been added starting with PicPro to NHF version 1.0.7 to support the new option of Grouping Images by Order.

Noritsu Hot Folder is the next option to enter as shown below.

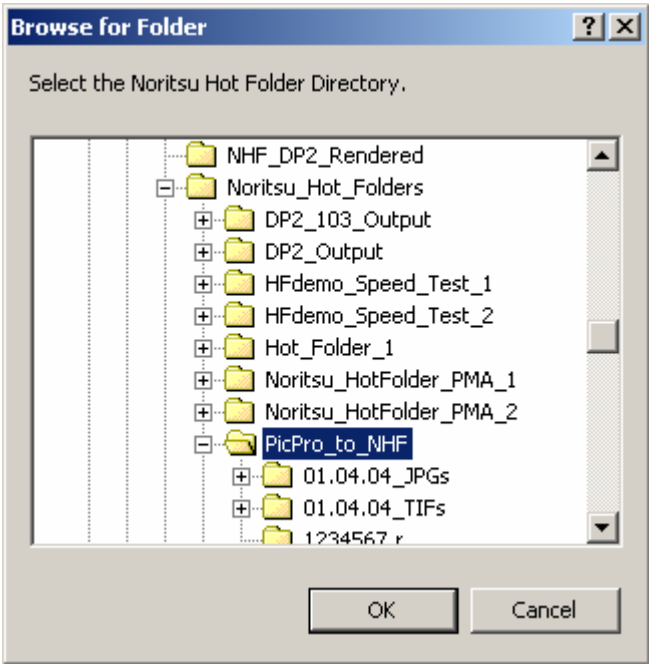


"Noritsu Hot Folder path field" on Options window

This should point to the directory that you have setup for Noritsu Hot Folder to monitor for orders that are ready to print.

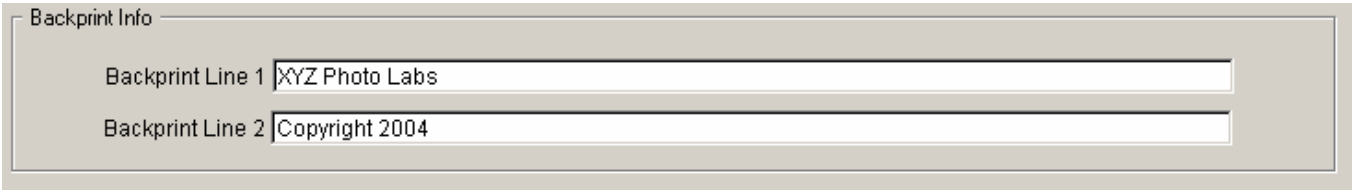
In our example, we created a directory labeled “Noritsu_Hot_Folders” and then created another directory inside of it for our PicPro orders and labeled it “PicPro_to_NHF”.

Click the Browse button and navigate to your NHF hot folder directory that you want our application to create the Order directories for NHF orders and select it as shown below and then click the OK button to pull the path into the options field



“Browse for Folder” explorer window

Backprint Info is the last section to enter and is shown below.



“Backprint Info fields” on Options window

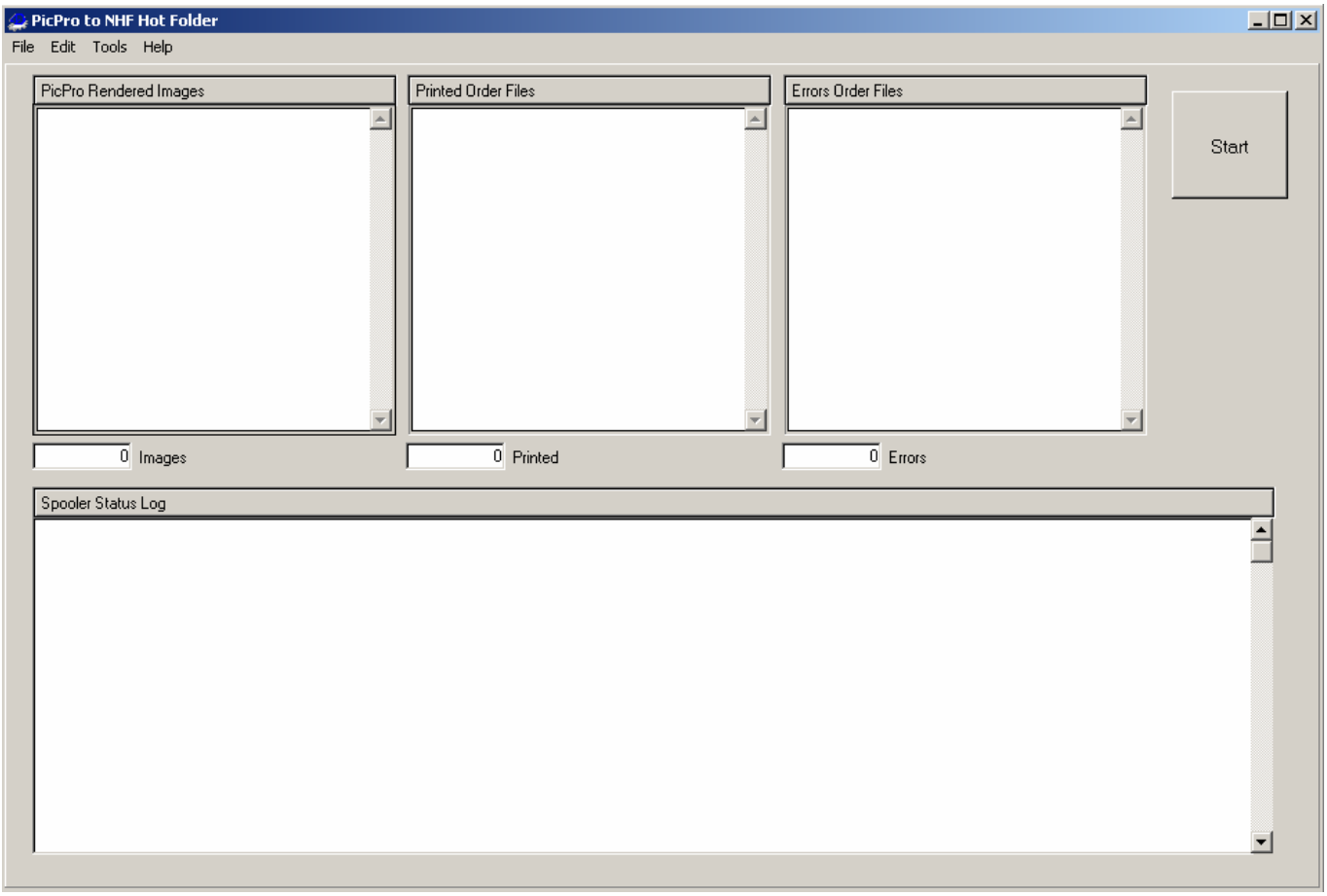
Here is where you enter information or macros that are accepted by Noritsu Hot Folder to determine what Backprint Line 1 and 2 will be printed on all prints created for the NHF printer.

The example simply shows fixed text that will be used. Refer to the Noritsu Hot Folder application reference manual to determine what other options are available for back printing.

Once all the options are entered, click the "OK" button at the bottom right corner of the screen to save your settings and return to the main application window.

NOTE: If you click the Cancel button, none of your entries will be saved.

This will return you the "PicPro to NHF" application main window.



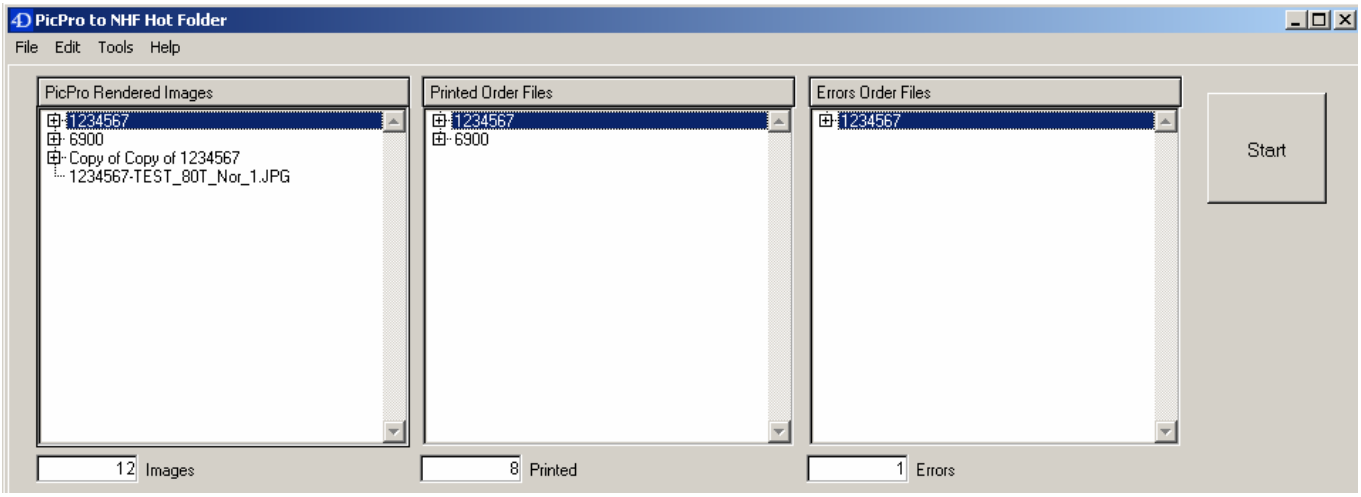
"PicPro to NHF" application main window

If you wish to change your Options settings at any time, you can access them by clicking on the "Tools" menu at the top of the application main window, and pull down to "Options" as shown below:

"Tools / Options menu item"

This will open the Options dialog screen, and you can make any modifications that are necessary.

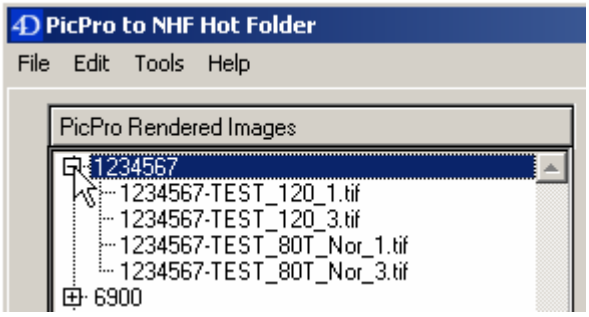
Once all the Options fields have been completed, click the "OK" button at the bottom right corner of the screen to save your settings and return to the main application window.



Top section of main application window.

The top section of the main application window now shows order directories in the **"PicPro Rendered Images"** scrolling window, which means that these order files are ready to loaded.

If you click on the "+' symbol next to one of the OrderID directories, the list will expand to show what rendered image files are included in that order as shown below.



"Expanded OrderID directory containing Images"

The rendered image filenames will consist of 4 parts:
OrderID
Image Name without extension
Package Code
Quantity

OrderID: The first section consists of all characters starting at the first character of the filename up to, but not including, the first dash ("-"). This is the OrderID.

Image Name: All characters starting after the dash and up to the first underscore ("_") will be the original image filename without the extension.

Package Code: All characters from first underscore to second underscore will be the Package Code.

Quantity: All characters from second underscore up to the extension.

There will be exceptions to this rule if the original image filename has underscores in it. It is because of that reason that we parse the filename starting at the end and working backwards, but it is much easier to explain starting at the beginning of the filename, since we are used to reading from left to right.

After you process some actual order files, if they are successfully processed and sent to NHF, the result logs will be moved to the "**Printed Order Files"** window. If an error occurs at any time while working with an order file, the image file, along with its result log get moved to the **"Error Order Files"** window.

Both of these scrolling windows are linked to directories that get automatically created on your hard drive inside of a directory that is labeled "PicPro_to_NHF_Results".

Very Important: In order for this directory and other directories to be created automatically, you must be logged into the workstation with Administrative privileges, or at least have Administrative privileges for the share that the PicPro Rendered Images directory is located in.

The "PicPro_to_NHF_Results" directory will be located on the same directory level as the "PicPro Rendered Images" directory.

Inside of the "PicPro_to_NHF_Results" directory will be three directories:
1. "Errors"
2. "Printed"
3. "Result_Logs"

The **"Result_Logs"** directory is a temporary location in which a Result Log for every order that we process is written while the order is being processed.

If the order is processed without any errors, then once it has completed, the Result log for that order is moved from the "Result_Logs" directory, into an OrderID directory inside the **"Printed"** directory. It is those files that you will see in the **"Printed Order Files"** scrolling window on the Main application window.

In each Result Log are details about the processing of that order, in case an error occurs, you can then look at the Result log for that order to see what went wrong.

The filename of the Result Log will vary depending on whether or not you have checked the "Keep All Images in Order directory together" checkbox on the Options window.

If it is Unchecked, then the filename of the Result Log is always the same as the rendered image filename but with the extension ".log". This makes it easy to find the result log that goes with the rendered image file in case an error does occur.

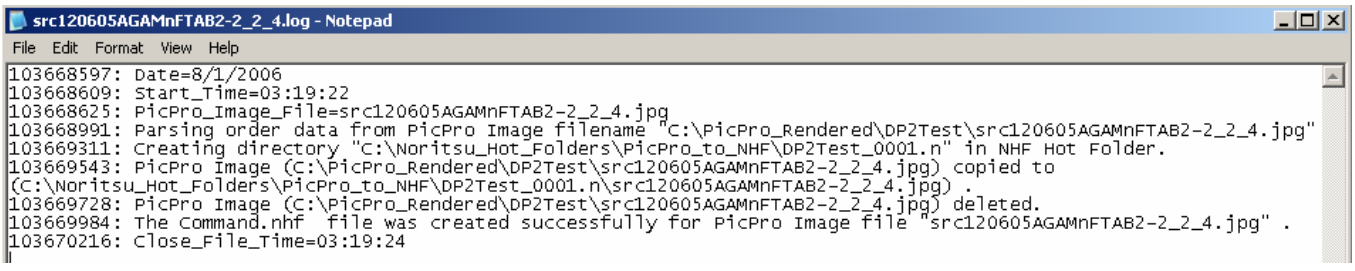
For example:
If the PicPro rendered image filename is: "1234567-TEST_120_1.tif", then the result log file for that image would get labeled: "1234567-TEST_120_1.log".

If it is Checked, then the filename of the Result Log will be the same as the Order directory name, but with the extension ".log". This makes it easy to find the result log that goes with the Order file in case an error does occur.

For example:
If the PicPro Order directory name is: "1234567", then the result log file for that Order would get labeled: "1234567.log".

If an error occurs at any time while processing a specific rendered image file, the Result log for that image file, as well as the rendered image file, are moved from the "Result_Logs" directory, into an OrderID directory inside the **"Errors"** directory. The OrderID directory would be labeled "1234567" in our example above. It is those files that you will see in the **"Errors Order Files"** scrolling window on the Main application window.

Below is an example of the contents of a Result log opened with a text editor:



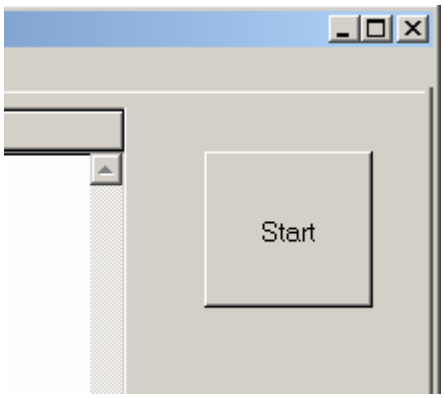
"Result log contents" viewed in Notepad

The result logs give you a way to determine what occurred while processing an order file after the fact, so that you can run the application unattended, and only investigate orders that end up in the Errors directory.

NOTE: Starting with version 1.0.7 we have added the time in milliseconds followed by a colon at the left end of each line to help in diagnosing any problems related to speed of processing.

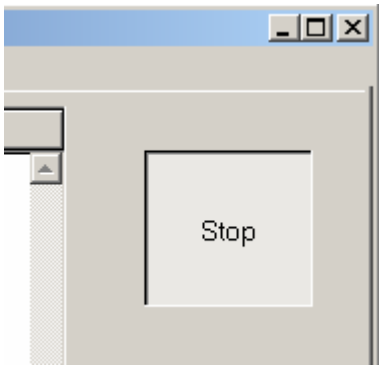
Start the Hot Folder Spooler:

To launch the "PicPro to NHF" automatic spooler that monitors the "PicPro Hot Folder" directory for OrderID directories containing rendered image files coming from PicPro, simply click the big square "Start" button in the top right corner of the main application window.



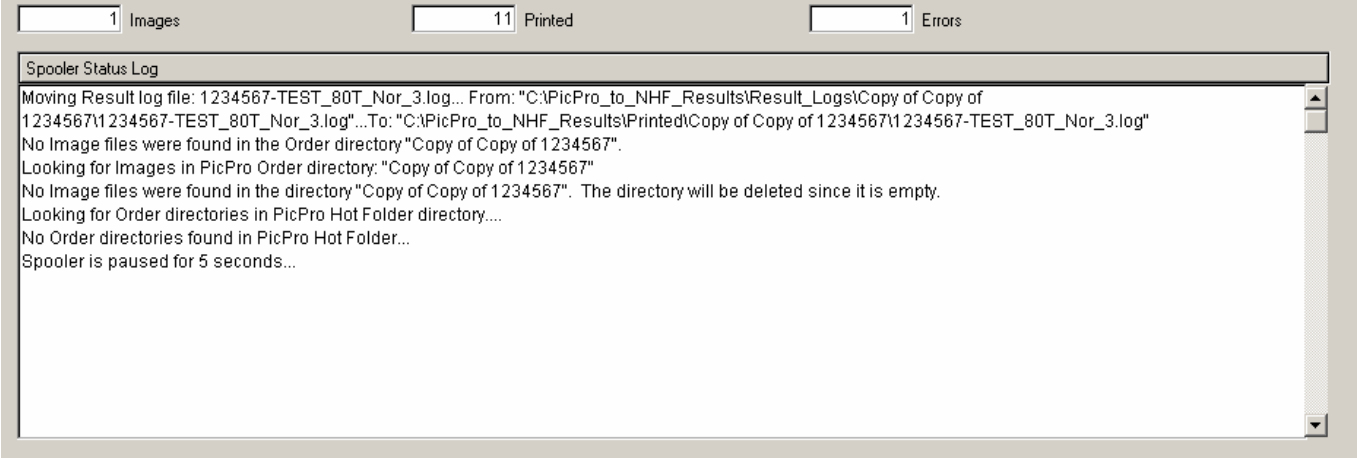
"Spooler Start button"

When you click the Start button, the button will then be depressed and the name will change to "Stop" as shown below.



"Spooler Stop button"

When you click the Start button, the spooler will start processing the first order that is in the PicPro Hot Folder directory, and the status lines will be shown in the "Spooler Status Log" window at the bottom of the main application window as shown below.



"Spooler Status Log" section of the main application window

The application will continue to spool orders from PicPro Hot Folder directory and send them to NHF until the "Stop" button is clicked.

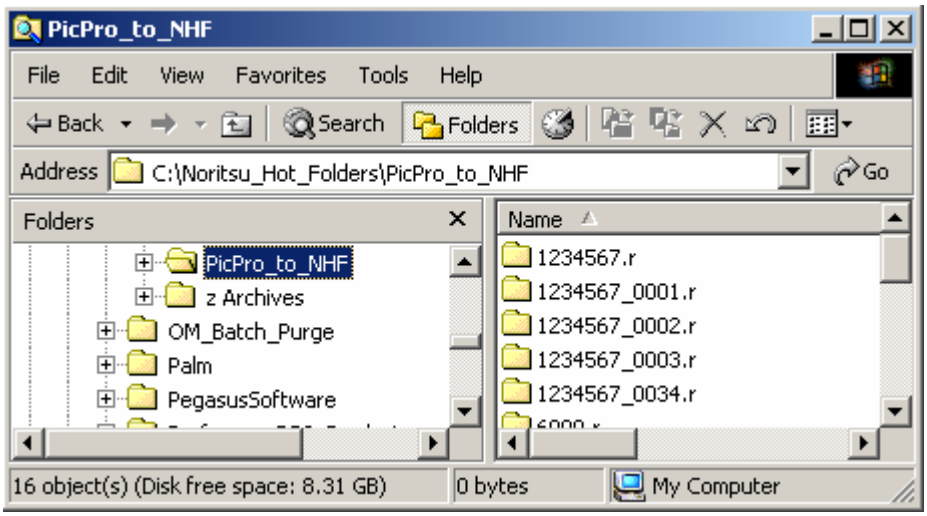
Creating Noritsu Hot Folder Orders

As each rendered image file gets processed, the application will create a directory in the NHF hot folder directory that you entered in the Options "Noritsu Hot Folder" path field.

The directory name will be the Order ID parsed from the rendered image filename, plus the extension ".n" which tells NHF that this order is not ready to print yet.

Then it will create a Command File inside that Order ID directory and move the rendered image for that order item.
When "PicPro to NHF " finishes creating the Command file and moving the rendered image into the OrderID directory, it changes the name of the directory so that it ends in ".r" which instructs the Noritsu Hot Folder that this job is ready to be printed.

"Noritsu Hot Folder" will send the orders to the printer in ASCII sort order if there are more than one directory that end in ".r" at the same time.



As you can see in the example above, we have several Order directories that start with "1234567". That is the Order ID from the rendered image filename for these Order Items.

When the "PicPro to NHF" application sees an existing directory in the hot folder with the same Order ID directory name, it automatically appends a sequence number to the end of the directory name so that it does not overwrite an existing directory.

In this example, each of the last 4 directories contains Order Items from the same OrderID, so the sequence number string "_0001", "_0002", etc. was appended to each filename. This will occur if you run an order from PicPro that has more than one order item and you have the option to Group Images by Oder turned off, or if you rerun any part of an Order that has previously been sent to the NHF application.

New Group PicPro Images by Order feature:

Starting with "PicPro to NHF" version 1.0.7, there are two different options for how images rendered from PicPro can be submitted to the NHF hot folder directory.

1. Ungrouped ("Group PicPro Images Option" Unchecked)
2. Grouped by Order ("Group PicPro Images Option" Checked)

Ungrouped:

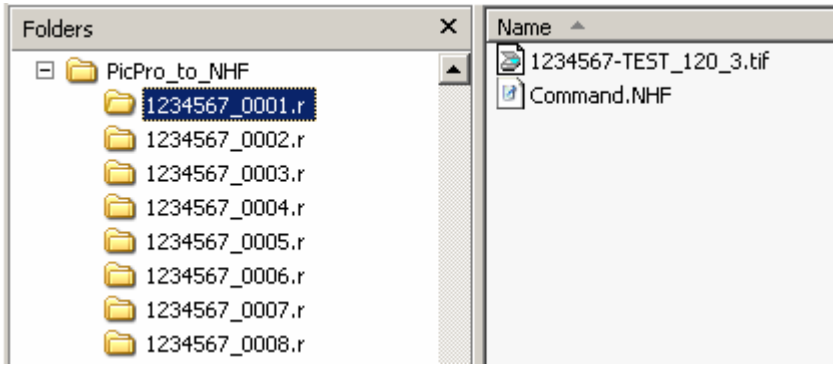
This option will treat each image rendered by PicPro as a separate order for NHF. So you will see a separate OrderID Directory in the NHF Hot Folder directory for each rendered image. However, since NHF runs orders in ASCII sort order, the order in which the items come out of the printer will be based on the ASCII sort order of the rendered image filenames.

Grouped:

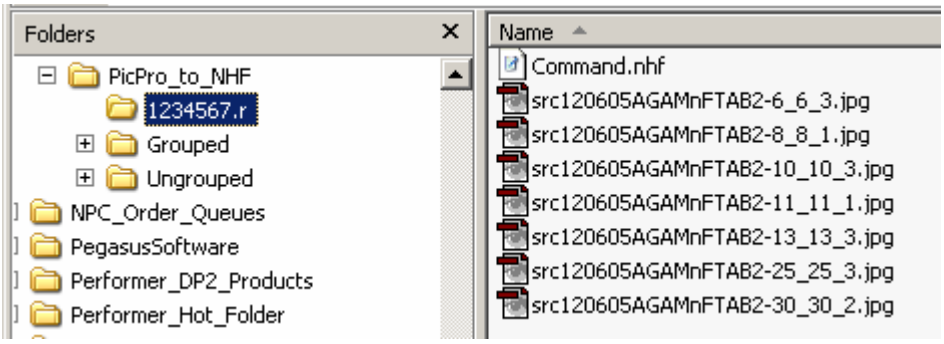
This option will keep all images rendered by PicPro into the same Order directory as the same order for NHF as long as the Options settings are correct. So you will see a single OrderID Directory in the NHF Hot Folder directory with a single Cmd file for all rendered images for that order. The order of the images within the Order will be based on ASCII sort order of the rendered image filenames within the order.

Use the Back printing features in NHF to identify what Order the prints belong to. Since the rendered image filename starts with the Order ID you can use the Filename macro in NHF to put the rendered image filename on the back of the prints created from it. Please refer to the NHF reference manual for further details on Backprint1 and Backprint2 lines.

If you open up one of the Order directories in the NHF Hot Folder directory you should see something like the following.



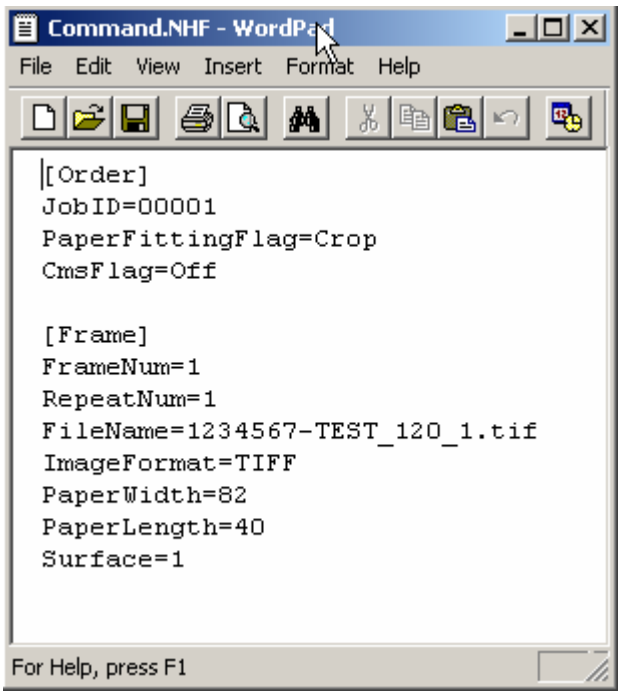
"Contents of Order directory" Ungrouped in NHF hot folder



"Contents of Order directory" Grouped in NHF hot folder

There will be a file labeled "Command.nhf" as well as the order item rendered images that PicPro rendered to disk for that Order.

If you open the “Command.nhf” file using WordPad or NotePad it will look something like the following.



This order contains only one item, and you can see the Filename matches that of the one image in the Order directory.

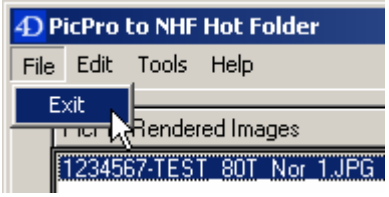
The JobID is a randomly generated number that is created in order to prevent sending multiple orders to the Noritsu Net Order printer with the same RefID. It does not correspond to the Order ID in PicPro at all.

PaperWidth and PaperLength have been converted from the DP2 unit of measure which is inches, to millimeters before sending the order to the printer. 254 x 203mm (10 x 8 in.)

If you get to this point, then you know that your Setup for the “PicPro to NHF” application is working correctly. If you have not already done the setup for the Noritsu Hot Folder application, you should do that now and then proceed to testing these orders that are in the hot folder directory.

Exit the Application

Whenever you wish to exit the application, simply click on the File menu bar item and pull down to “Exit”, or click the “Close Box” in the top right corner of the application window.



“File / Exit” menu bar item

Noritsu Hot Folder Installation and Setup:

Instructions for the "Noritsu Hot Folder" are installed during its installation process. So please refer to the NHF Reference manual for those instructions.

Once the "Noritsu Hot Folder" is setup and running, then you are ready to start sending orders.

Upgrading from a previous version:

If you have a previous version of "PicPro to NHF" installed on your computer, and you are installing an upgrade or new version, the installer will create new directories for the new version and will add shortcuts for accessing the application files in your Start / Programs menu.

The installer will not delete the previous version so you will still have access to it in case there are any problems with the newer version. Once you are satisfied that the new version is running as you expect with no problems, you may choose to delete the old version as a matter of cleaning house.

Using existing Data File with New Version: (After installation of the new Application version)

In order to prevent having to re-enter all of your preferences on the Options window, there is a simple procedure for copying your data files for use in the new application directory.

In our example we will show upgrading from version 1.0.6 to 1.0.7, but the procedure will be the same no matter what version you have installed with the exception of the new name given to the data files.

The default location for installation of the PicPro_2_NHF application files is in the following location:

"C:\Program Files\PicPro_to_NHF\"

Each version will have its own directory inside this path. Therefore, all the files for version 1.0.7 would be found in the following path:

"C:\Program Files\PicPro_to_NHF\PicPro_to_NHF_v1.0.7\"

PicPro_2_NHF stores all preferences and database records in two files. The files will have the same name but different extensions.

Note: In order to see the extensions you will need your Folder Options / View preferences to have the "Hide file extensions for known file types" unchecked.

The data files for v1.0.7 would be the following two filenames:

PicPro_to_NHF_v107.4DD - The Data file
PicPro_to_NHF_v107.4DR - The Data Resource file

FYI: The reason for two files is that 4D, the development system used to create this application, is a cross platform compatible development shell which can run on Windows or Mac workstations depending on how the code is compiled. On Macs every file has a resource fork included in the same file, but on PCs this is not possible so the Resource file contains the same information that would be in the Resource fork of the Mac format file.

The data files that get installed by the installer are blank data files. So in order to replace the blank data files with your previous version data files, you simply copy the two files from the previous version application directory and rename them to the new version name, then replace the blank data files with the renamed files.

So in our example, you would browse to the old version 1.0.6 application directory:

"C:\Program Files\PicPro_to_NHF\PicPro_to_NHF_v1.0.6\"

Then copy the following two files:

PicPro_to_NHF_v106.4DD
PicPro_to_NHF_v106.4DR

It is advisable to paste them in a temporary location for renaming.

Rename them both to the following new names:

PicPro_to_NHF_v107.4DD
PicPro_to_NHF_v107.4DR

Now copy the two files and paste them into the new v1.0.7 application directory. If you have renamed the files correctly you will be prompted by the OS asking if you are sure you want to replace the files with the same name. You should click OK and the blank data files will be replaced by your current data that you have renamed.

The reason for renaming the files is that PicPro_2_NHF will always look for a data file with the same name as the application file in the same directory on launch of the application by default. If it is not found, then it will prompt you for what data file to open. By renaming the files to match the new version of the application, it will avoid the confusion that might be caused by this and the potential problem of opening the wrong data file.

Support Contact Information:

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

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