KOFAX TO LASERFICHE RELEASE SCRIPTS

TECHNICAL & USER DOCUMENTATION

Updated: August 2006

Overview:

Bluelake Software sells and supports two flavors of Kofax to Laserfiche Release scripts. Both feature a graphical, point-and-click setup utility for designating output from Kofax Ascent Capture to up to three locations in a single release: to Laserfiche®, to a flat file, and to a database.

In both flavors, Laserfiche document names can be specified based on a naming pattern, or the contents of an index field, or both. Flat file output can be performed in standard Ascii comma-delimited format, or custom formats with user-specified field delimiters. Both Laserfiche® and flat file output can be configured to increment or overwrite existing file names, or append output to existing files. Database output can be performed to any ODBC-compliant database or direct to Microsoft Access®.

This three-prong output can support (for instance) a release of image files and data to Laserfiche®, along with an ascii file containing data to update a third party application, along with output to a reporting database, in a single release, without programming.

The Kofax to Laserfiche Standard Release Script produces LST files for import by a separate import process (purchased separately) into Laserfiche.

The Kofax to Laserfiche Direct Release Script imports documents directly into Laserfiche during the Kofax Ascent Capture Release process.

Depending on the implementation scenario, you might use one or the other flavor of the Release Script, as follows:

Standard Release Script:

The Standard release script produces one LST file per document released from Kofax. This version of the release script is preferred for high volume environments, where a centralized Laserfiche import process receives LST files (and associated image files) from multiple scanning stations. This approach has the virtue of utilizing a single import process on the Laserfiche server, thus utilizing a single Laserfiche Full user license, rather than one Full license for each scan station. (A full user license is required during configuration, but configurations can be copied from scan station to scan station). An additional advantage to this approach is that since imports are centralized, the process of auditing and verification of documents imported is also centralized into a single log file.

This version of the release script will require the addition of an import processor, such as our own Import List Manager product, Laserfiche's Import Agent, or the somewhat more manual LFASSIST process included with Laserfiche's Snapshot product.

Direct Release Script:

The Direct release script writes directly to the specified Laserfiche database through the Laserfiche API, during the Kofax Ascent Capture release process. It therefore utilizes a full

user license for the duration of the release from Kofax, but does not require any additional Import utility as with the Standard release script. This version of the release script is preferred for single scan station sorts of implementations.

In multiple scan station environments, especially where Laserfiche license usage is heavy, it is more likely that the Kofax to Laserfiche Direct Release script will encounter a "maximum users exceeded" issue, aborting the release. Release will then have to be restarted for the Kofax batch encountering the issue.
(Our Import List Manager product, paired with the Standard Release Script, can be configured to retain a license permanently, or to release the license between polling intervals. In the event a license is not available, the process will sleep for a configurable period of time, then it will retry the import.)

Kofax to Laserfiche Release Script Feature Comparison:

Feature	Standard	Direct
Point and click configuration	●	●
Release to 3 locations at once: Laserfiche, Flat File, ODBC data Source	●	●
Accept/Reject tracking and application logging.	●	●
Dynamic Laserfiche document naming*	●	●
Dynamic Folder naming**		●
Specify Laserfiche Volume	***	●
Requires additional Import Process	●	
Laserfiche License Usage	Full User license during configuration	Full User license during configuration & release.
List Price	$1200	$1500

* Laserfiche Document names can be specified with up to 2 Kofax index fields.
** Laserfiche Folders can be created/named with up to 2 Kofax index fields.
*** Volume can be specified using our Import List Manager product.

System Requirements:

Both of our Kofax to Laserfiche Release Scripts require Laserfiche Client 5.x or above and Ascent Capture 5.x or above present on the workstation or server during configuration, and while running the Release process. Each has been tested using Kofax Ascent Capture versions 5.51 through Kofax Ascent Capture 7.5.

Recent changes in the Laserfiche software have required us to maintain separate installs according to the versions of Kofax and Laserfiche that are being deployed. The table below summarizes these versions:

Laserfiche Version	**Kofax Ascent Capture Version**	**Std Release App Name**	**Direct Release App Name**
Less than or equal 7.0x	5.51 THROUGH 7.5	KFXTOLF.EXE	KFXTOLFAPI
7.1.2	5.51 THROUGH 7.5	KFXTOLF7.EXE	KFXTOLFAPI7
7.2	5.51 THROUGH 7.5	KFXTOLF7.EXE	KFXTOLFAPI72

Installation Instructions

To obtain the latest version of the software on an evaluation basis, go to www.bluelake.com and select *Products.*

For the Standard Release Script – see below.

For the Direct Release Script – see Page 16.

Kofax to Laserfiche Standard Release Script Installation & Configuration:

Prerequisites: The workstation on which the Release script is being installed must be pre-installed with the following:

1. Kofax Ascent Capture with a valid workstation license (pre-Kofax AC version 7) or an Ascent Capture Full license (Kofax AC version 7 or above).

2. The Laserfiche client software with a Full user license.

Before invoking the release script install, the Kofax Ascent Capture installation should be tested and functional, and the Laserfiche client must be able to access and login to a valid Laserfiche repository.

Installation:

Invoke the Bluelake Release script installation and follow the onscreen instructions to install the release script DLL and related components.

The install will first ask for the destination directory. The default is: C: \Program Files\Ascent\LF_RLSE. If you change this directory make a note of it. It will be needed in Configuration Step 2.

Within the Bluelake installation routine, the Laserfiche API runtime installation will also be invoked. At the end of the Laserfiche API installation, when prompted to reboot, select "NO". A second prompt will appear when the Bluelake installation routine is finished, and at that time you will have an opportunity to reboot.

As part of the installation, the LF_RLSE directory will be created automatically if it does not exist. The files installed into this directory include the following:

KFXTOLF.DLL
KFXTOLF.INF
KFXTOLF.MDB

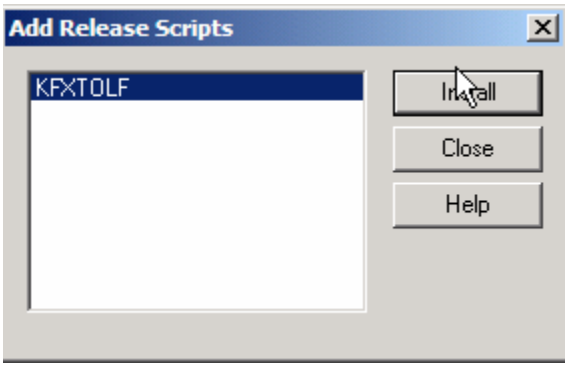
Standard Release Script Configuration:

1. Register the Release Script with the Kofax Ascent Capture software:

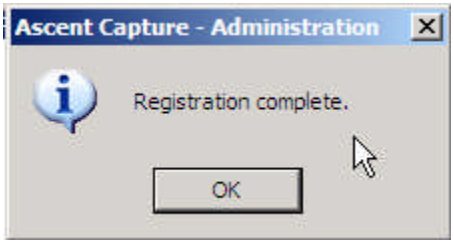
   Steps:

   a. From the Kofax Administration module, select *Tools, Release Script Manager* and click "**Add**".

   b. Navigate to the install directory (default= C:\Program Files\Ascent \LF_RLSE) and select the KFXTOLF.INF file. Highlight the KFXTOLF entry in the Add Release Scripts window and select "Install", as shown below.



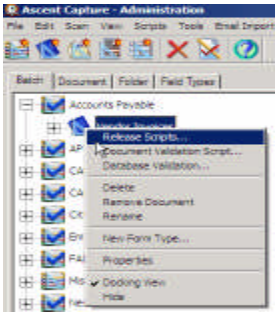
   c. You should receive a Registration Successful message, as shown below.



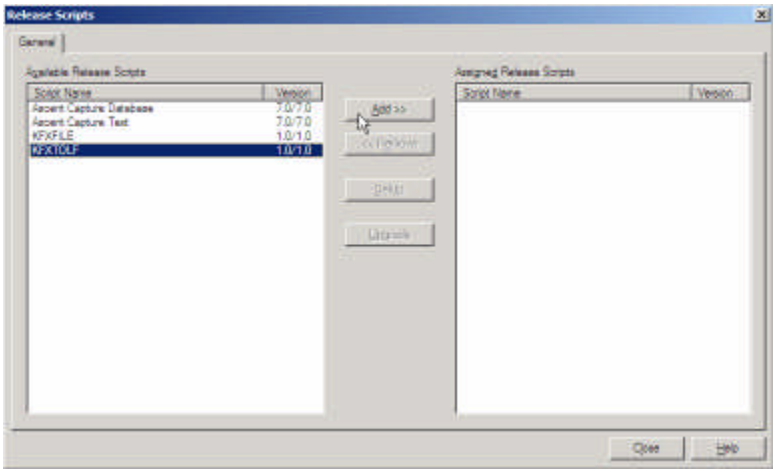
2. Add the Release script to an existing Kofax Ascent Capture Batch class.

   Steps:

   a. In the Kofax AC Administration Module, select a Document Class, right click and select "Release Scripts…

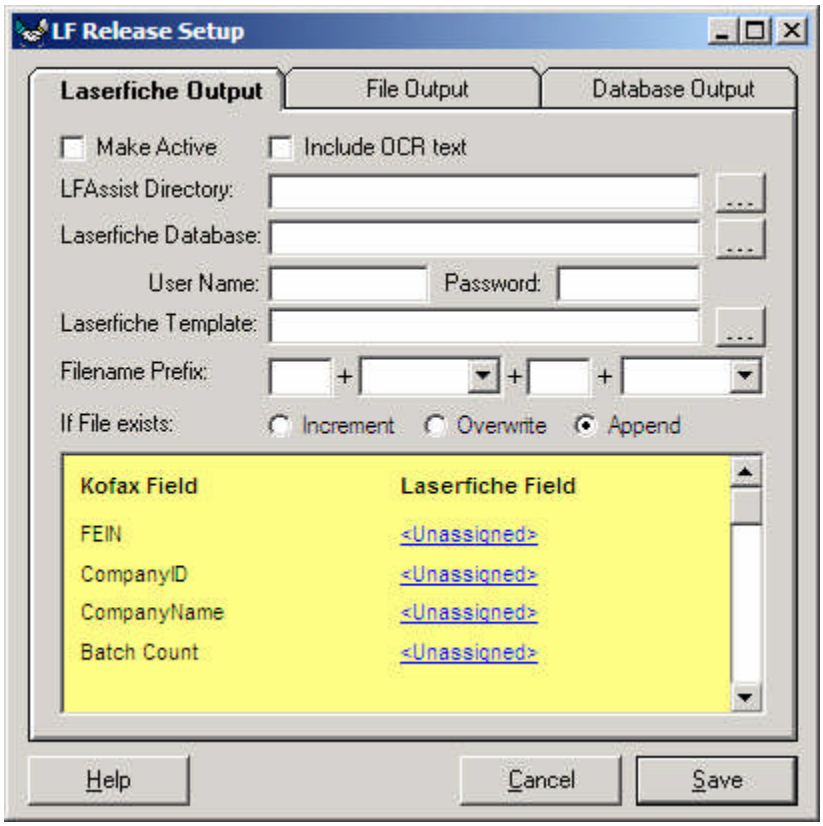


b. In the *Available Release Scripts* list, single click to select KFXTOLF and select *Add…*



c. The Release configuration window will be displayed, as shown below.

Figure 1 - Kofax to Laserfiche Configuration – Laserfiche Output Tab



The Laserfiche Output tab of the Kofax to Laserfiche Standard Release Script contains the

following options – see below.

Make Active
In order to produce Laserfiche LST files, this option must be checked. Un-checking the option will preserve the configuration information for the Laserfiche release, but files will not be created.

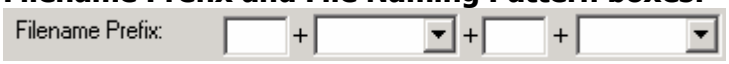
Include OCR Text
Check this option to have Full OCR text forwarded from Kofax into Laserfiche. You must include an OCR step as part of your Kofax configuration in order for there to be text to import.

LFASSIST Directory:
The windows directory location that will contain the .LST files created during the Release process. (It owes its name to what was once the only method for importing into Laserfiche). Click on the browse button to navigate and select a Windows directory. The directory specified here should match the directory specified in your chosen Laserfiche Import application's import location (Bluelake's Import Manager, Laserfiche's Import Agent, or Laserfiche's LFASSIST process)

Laserfiche Database:
The name of the Laserfiche database that will contain the files and data exported from Kofax. Specification of the database allows point and click selection of the other Laserfiche objects - Template and fieldname specifications. Click on the browse button to view and select from a list of defined Laserfiche databases.

Laserfiche Template:
The name of the Laserfiche template that will be populated with the index data exported from Kofax. Click on the browse button to view and select from a list of defined Laserfiche templates.

Filename Prefix and File Naming Pattern boxes:



There are a total of 4 entry boxes that are available for providing file naming patterns for documents when they are released to Laserfiche. The first and third boxes allow free form text entry, while the 2nd and 4th boxes are dropdown lists containing the names of Kofax Ascent Capture index fields. At Release time, the values are interpreted left to right, and any omitted values are ignored when compiling the filename.

For instance, you could configure the file names for documents released into Kofax to be something like INV_<FEIN = federal employer id>_<company name>, as show below:

Under the above scenario, an example output file might be INV_456-77-8910_ABC Co.TIF.

An important consideration when selecting fields for use in file naming, is the type of data that might appear in Kofax Ascent Capture index fields. If the selected field(s) contain

characters that are invalid in either Windows filenames, or in Laserfiche filenames, an error will result. The release script has character replacement logic for forward slashes ("/") that appear in date fields – it will convert these to hyphens – for instance 01/02/2005 becomes 01-02-2005. However, other unanticipated character values will not be replaced by the release script and will result in errors releasing a given document into Laserfiche.

Default document names: If file naming pattern values are omitted, the Release script will use the first and second Kofax Ascent Capture defined index fields for file naming. If only a single index field is provided in Kofax Ascent Capture, only that field will be used.

Note that Laserfiche has its own internal handling for duplicate file names – appending a value in parenthesis to the filename – for instance: *INV_456-77-8910_ABC Co **(2)**.TIF.* Likewise, the Release script will handle duplicate file names according to how the Increment/Overwrite/Append options are defined, as discussed below.

Increment/Overwrite/Append file options:
When the Standard Release script releases documents from Kofax Ascent Capture, they are placed in the defined LFASSIST directory (see above) within the Windows file system. A single "document" as it is eventually housed in Laserfiche is first stored in the Windows environment as multiple files: A text file whose name ends in .LST, representing Laserfiche's own proprietary import format, as well as a collection of one or more image files, each of which is referenced within the LST file for a document.

Depending on how often files are imported into Laserfiche from the LFASSIST directory, some thought might need to be given for what to do if duplicate file names are found in the LFASSIST directory, during the release process. For example, if the naming convention were <customer no>_<scan date> and more than one document were scanned for the same customer in the same day, the second time a document came through for the given customer a duplicate LST filename would already exist. In order to avoid Release errors, the following options are provided. In 99% of cases, the Increment option should be used.

Increment will cause output file names to be automatically incremented when matching files of the same name are found during release process. The increment factor is 001 through 999. For instance, if TEST is the filename and a file named TEST. LST already exists at the beginning of the release, the file TEST. LST will be preserved, and a file called TEST001.LST will be created by the new release process. Each document released from Kofax will result in one .LST file being created by the release process.

Overwrite will cause existing file names to be overwritten when duplicate file names are created during the release process. Each document released from Kofax will result in one .LST file being created by the release process. If documents were being rescanned, intended to replace documents that were scanned previously, Overwrite should be selected. *Append* will cause data from a current release to be added to existing files of the same name. Documents from a current release will be appended to documents within the same file name from prior releases. Laserfiche's LST file format allows multiple document definitions to be contained within a single LST file, though we feel that one document per LST file is easier to manage – the Increment option will achieve the same thing while limiting each LST file to a single document.

The Field Mapping Window:

Mapping between Kofax fields and corresponding Laserfiche index fields is performed within the Field Mapping window (yellow), using point and click operations to associate Kofax fields on the left, with corresponding Laserfiche Template fields.

Figure 2: The field mapping window.

Clicking on any of the blue <unassigned> regions will bring up the Laserfiche field selection window, as shown below:

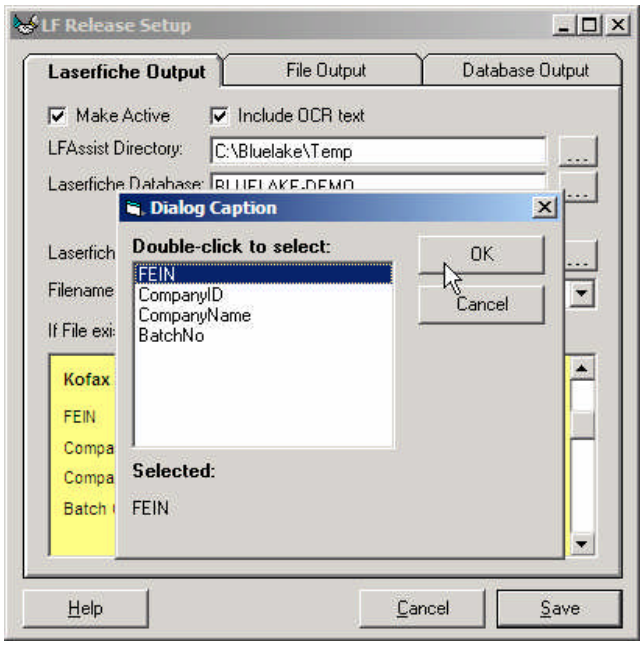


Figure 3: The field selection window.

With the **Select field** dialog displayed, double-click to select a Field from the list, or alternately, single-click and click "OK".

Perform this operation for each of the Kofax index fields that should be used to populate Laserfiche template fields.

When complete, the configuration window might look something like the following (see next page).

Click **Save** to save the changes, and **Close** to close the Kofax Release Script configuration window.

Make sure to **Publish** the batch definition in Kofax to make the configuration changes complete.

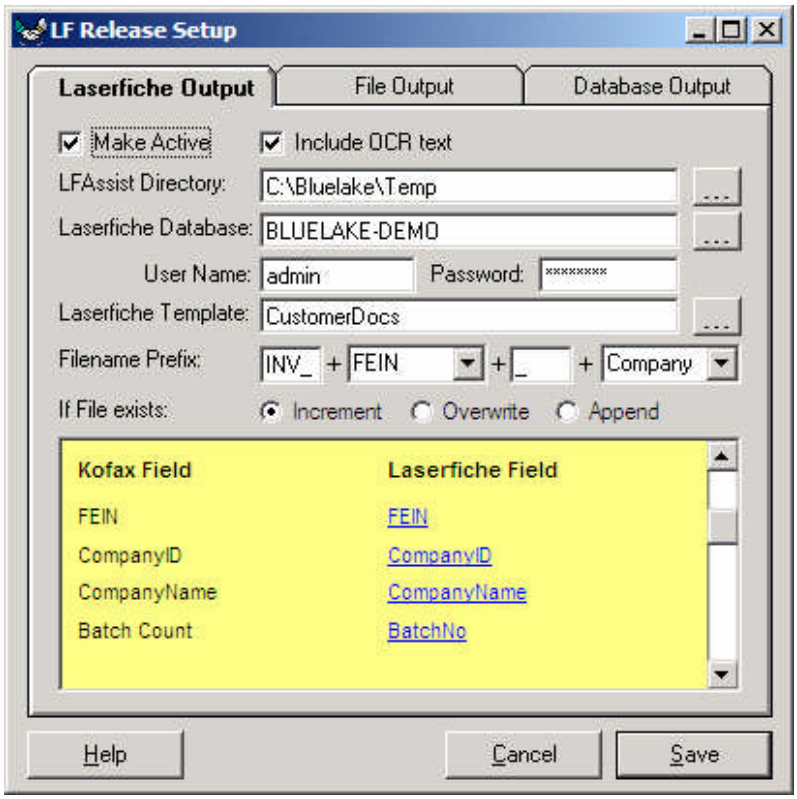
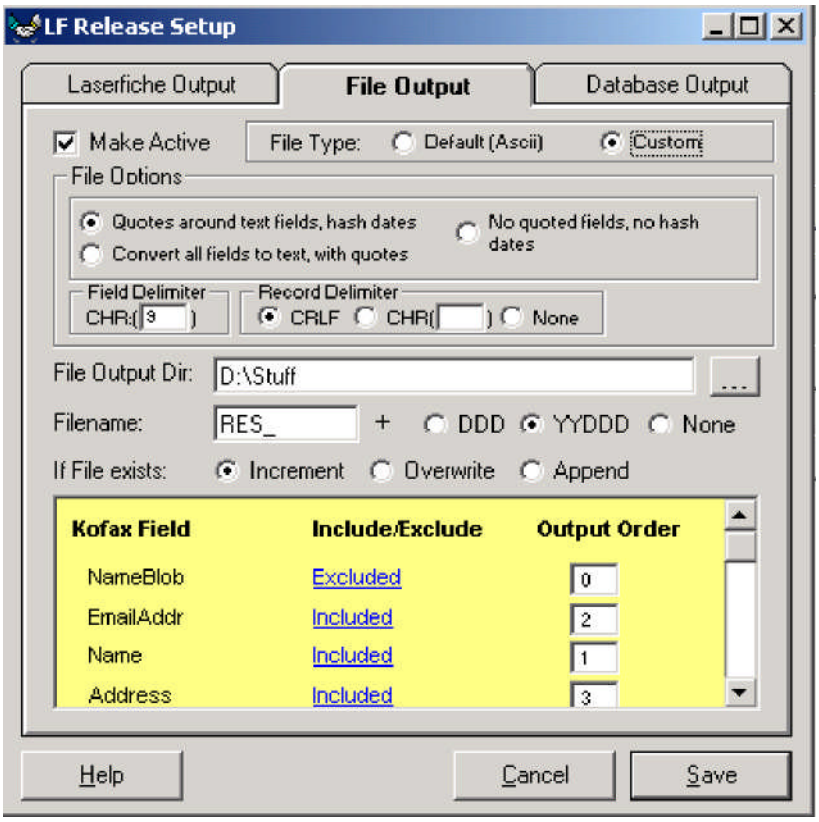


Figure 4: The completed Laserfiche Output configuration

File Output Configuration

The File Output configuration tab allows creation of a formatted text file, with considerable flexibility in terms of structure and content.

Figure 5 – Kofax to Laserfiche® Release script Configuration screen – File Output Tab.



The File Output tab contains the following options:

Make Active
In order to perform a release to a file this option must be checked. Unchecking the option will preserve the configuration information for flat file output, but files will not be created.

File Type:

Select "Default" to create a file in the standard ascii comma-delimited format, or select "Custom" to create a file in a custom format.

If the "Custom" option is selected, file options and field and record delimiter specifications must also be provided.

File Options:
Considerable flexibility is available for how data fields are written to the output file, as

follows:

Quotes around text fields, hash dates: This is a common format for Ascii files. Double quotes will be placed around text fields, no quotes will be added to numeric fields, and date fields will be surrounded by "#" characters – for example #01/01/2004#.

Convert all fields to text, with quotes: All fields will be converted to text, surrounded by double quotes (including numeric and date fields).

No quoted fields, no hash dates: All fields will be placed without addition of double quotes or hash marks for dates.

Field Delimiter:
The ascii character code corresponding to the desired field delimiter. For instance:

Dec Value	Character
44	, (comma)
9	TAB

Record Delimiter:
Select "CRLF" for carriage return, line feed pair (standard ascii convention), or provide an ascii character code value, or specify none for no record delimiter.

File Output Dir:
The windows directory location that will contain the flat files created during the Release process. Click on the browse button to navigate and select a Windows directory.

Filename:
The filename to be created within the file output directory, subject to the additional specification for the Increment/Overwrite/Append option. See below for more information.

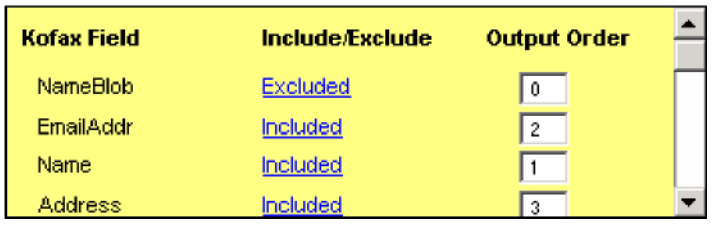
Increment/Overwrite/Append file options:
Increment will cause output file names to be automatically incremented when matching files of the same name are found at the beginning of the release process. The increment factor is 001 through 999. For instance, if TEST is the filename and a file named TEST.TXT already exists at the beginning of the release, the file TEST.TXT will be preserved, and a file called TEST001.TXT will be created by the new release process. Each document released from Kofax will result in one flat file being created by the release process, with the filename incremented each time.

Overwrite will cause existing file names to be overwritten when duplicate file names are found during the release process. Moreover, with Overwrite selected, data for all documents released from Kofax will be contained in a single file of the specified filename.

Append will cause data from a current release to be added to existing files of the same name. Documents from a current release will be appended to documents within the same file name from prior releases.

Selecting/deselecting Kofax Fields and mapping them to Laserfiche Index fields:

Figure 6: The field mapping window



Mapping between Kofax fields and corresponding Laserfiche index fields is performed within the yellow Field Mapping window. Click on any blue underlined value in the Laserfiche Field column to toggle it from Excluded to Included or vis versa.

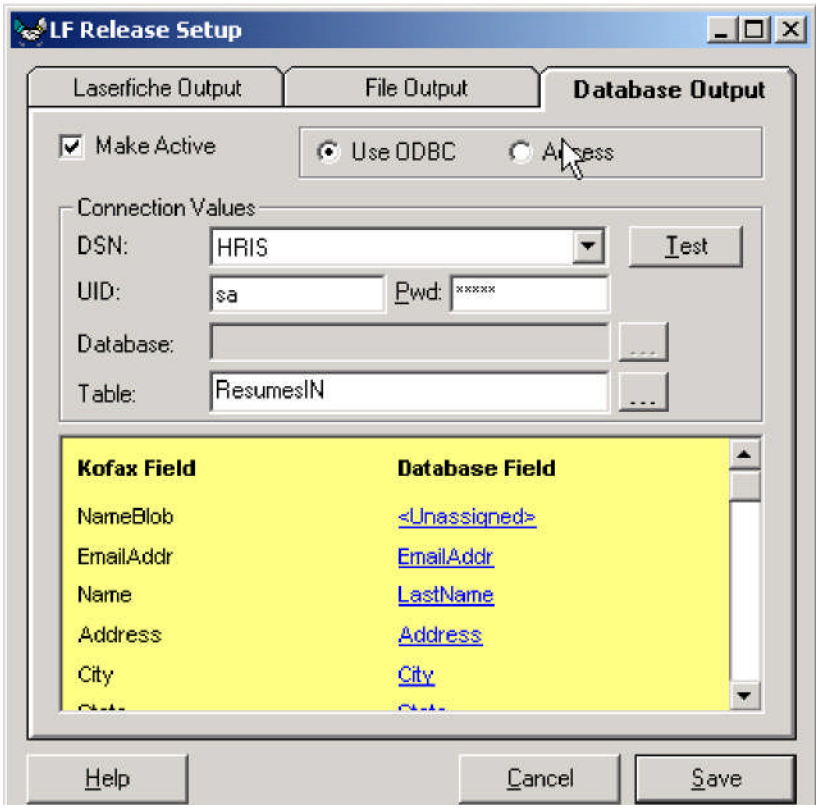
For each field Included, specify the output sequence for the given field in the form of a value from 1-on.

Click **Save** to save the changes.

Be sure to **Publish** the Kofax Batch class to commit changes to the Kofax Ascent Capture system.

Database Output Configuration

Figure 7 – Kofax to Laserfiche® Release script Configuration screen – Database Tab.



The Database Output tab contains the following options:

Make Active
In order to perform a release to a file this option must be checked. Unchecking the option will preserve the configuration information for flat file output, but files will not be created.

Use ODBC
Select this option to specify an ODBC data source.

Access
Select this option to specify an MS Access database directly, bypassing ODBC.

Connection Values:
Provide the requested connection values in the order they appear top to bottom on the window.

Mapping Window (yellow):
Click on the blue text to specify a database field.

Press "**Save**" to save the settings. Be sure to Publish when all settings are complete.

Installation Instructions – Kofax to Laserfiche Direct Release Script

Prerequisites: The workstation on which the Release script is being installed must be pre-installed with the following:

1. Kofax Ascent Capture with a valid workstation license (pre-Kofax AC version 7) or an Ascent Capture Full license (Kofax AC version 7 or above).

2. The Laserfiche client software with a Full user license.

Before invoking the release script install, the Kofax Ascent Capture installation should be tested and functional, and the Laserfiche client must be able to access and login to a valid Laserfiche repository.

Installation:

Invoke the Bluelake Release script installation and follow the onscreen instructions to install the release script DLL and related components.

The install will first ask for the destination directory. The default is: C: \Program Files\Ascent\LF_RLSE. If you change this directory make a note of it. It will be needed in Configuration Step 2.

Within the Bluelake installation routine, the Laserfiche API runtime installation will also be invoked. At the end of the Laserfiche API installation, when prompted to reboot, select "NO". A second prompt will appear when the Bluelake installation routine is finished, and at that time you will have an opportunity to reboot.

As part of the installation, the LF_RLSE directory will be created automatically. The files installed into this directory include the following:

KFXTOLFAPI.DLL **or** KFXTOLFAPI7.DLL **or** KFXTOLFAPI72.DLL
KFXTOLFAPI.INF
KFXTOLF.MDB

Direct Release Script Configuration:

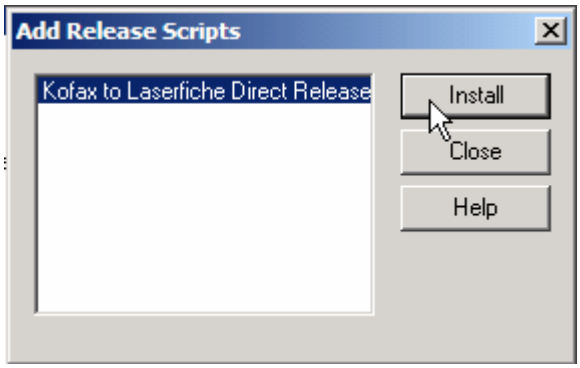
1. Register the Release Script with the Kofax Ascent Capture software:

   Steps:

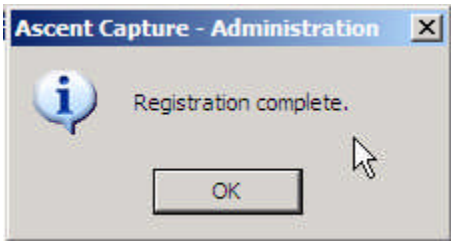
   d. From the Kofax Administration module, select *Tools, Release Script Manager* and click "**Add**".

   e. Navigate to the install directory (default= C:\Program Files\Ascent \LF_RLSE) and select the KFXTOLFAPI.INF file. Highlight the KFXTOLFAPI entry in the

Add Release Scripts window and select "Install", as shown below.



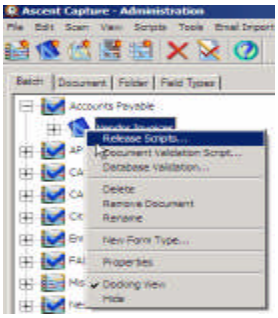
f. You should receive a Registration Successful message, as shown below.



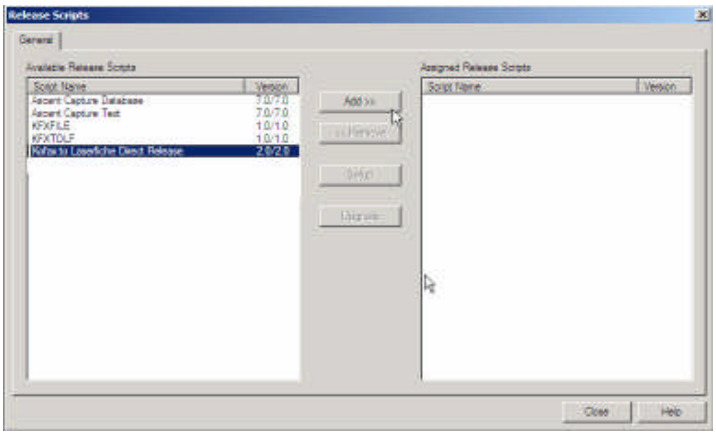
3. Add the Release script to an existing Kofax Ascent Capture Batch class.

   Steps:

   a. In the Kofax AC Administration Module, select a Document Class, right click and select "Release Scripts…

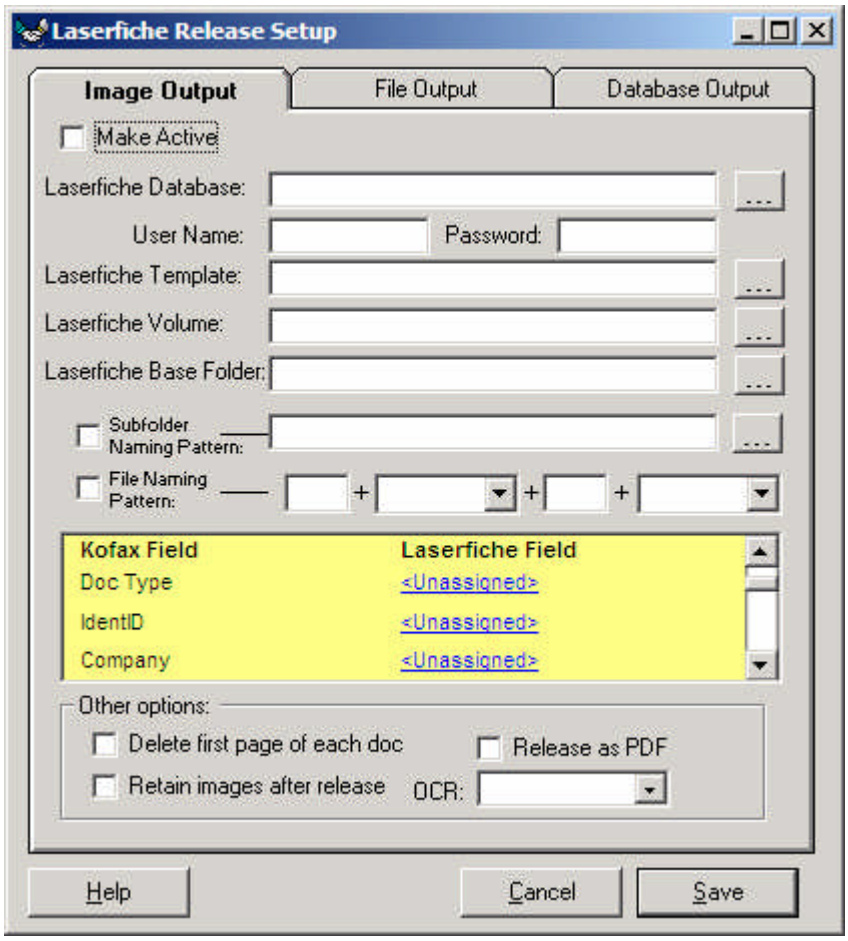


   b. In the *Available Release Scripts* list, single click to select Kofax to Laserfiche Direct Release and select *Add* ad shown on the following page…



c. The Release configuration window will be displayed, as shown below.

Figure 8 - Kofax to Laserfiche Configuration – Laserfiche Output Tab



The Laserfiche Output tab of the Kofax to Laserfiche Standard Release Script contains the following options – see below.

Make Active
In order to release documents into Laserfiche, this option must be checked. Un-checking the option will preserve the configuration information for the Laserfiche release, but Laserfiche documents will not be created.

Laserfiche Database:
The name of the Laserfiche database that will contain the files and data exported from Kofax. Specification of the database allows point and click selection of the other Laserfiche objects – Template, Volume and Folder specifications. Click on the browse button to view and select from a list of defined Laserfiche databases.

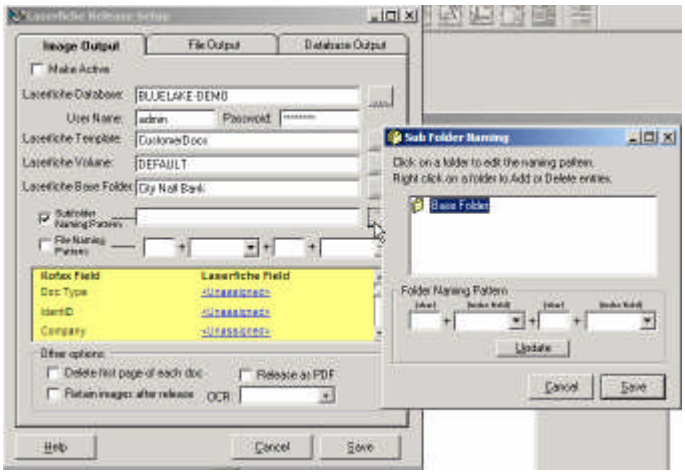
Laserfiche Template:
The name of the Laserfiche template that will be populated with the index data exported from Kofax. Click on the browse button to view and select from a list of defined Laserfiche templates.

Laserfiche Volume:
The name of the Laserfiche Volume to which documents imported into Laserfiche will be associated.

Laserfiche Base Folder:
The name of the Laserfiche root folder to which documents will be imported. If the Subfoldernaming option is selected, subfolders will be created relative to this location.

Subfolder Naming Pattern:
Checking this option will allow dynamic creation of subfolders within Laserfiche based on a combination of character strings and Kofax index field values. The Subfolder naming options now allow up to a theoretical limit of 32,768 folder levels, based on Kofax index field values.

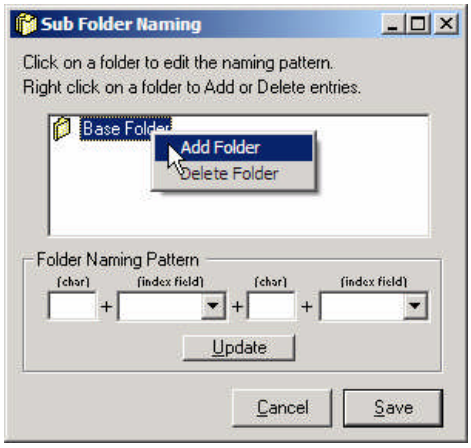
To use this option, first, check the Subfolder Naming option box, then click on the browse button next to the Subfolder Text field. The subfolder naming window will appear, as shown below:



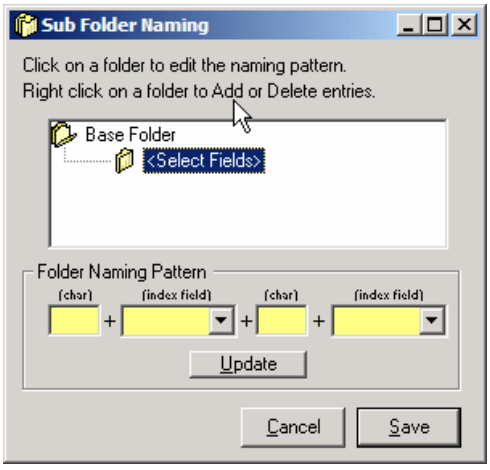
The Subfolder naming window provides an interface for adding nested folder levels below the specified Laserfiche Base Folder. To add a folder level, do the following:

Adding Subfolder levels – Steps:

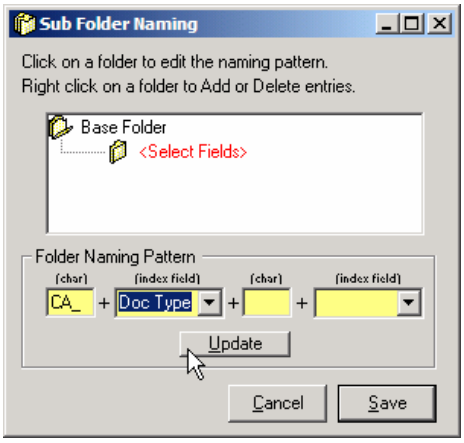
1. Right click on the Base Folder level and select "Add Folder".



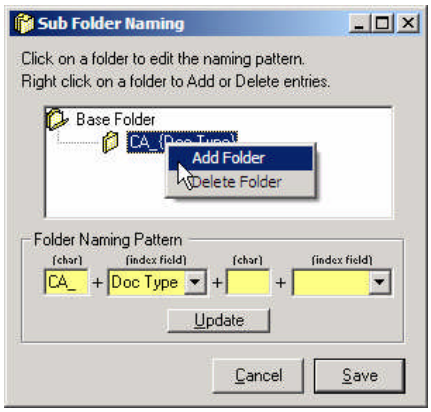
2. Single click to select the new folder level. The Folder Naming Pattern window will be highlighted in yellow, as shown below.



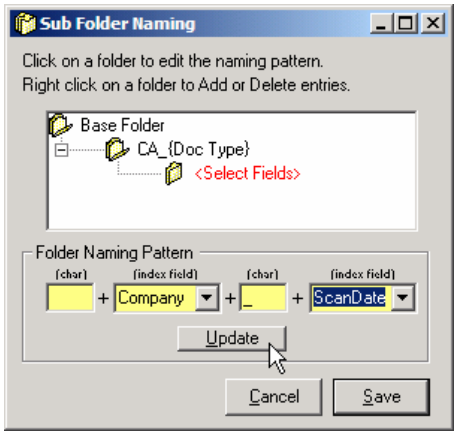
3. Provide the naming pattern for the current folder level, then click Update:



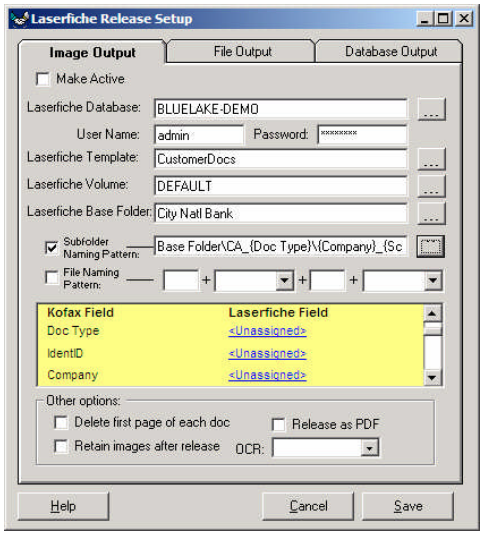
4. After update, additional folder levels can be added, starting from the previous level added, as shown below.



5. As before, single click to select the new level, then provide the folder naming pattern for the new level, as shown below. Click Update to save the new folder level.



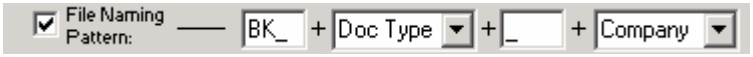
6. Click **Save** to return to the main Release Script configuration window.



File Naming Pattern boxes:

There are a total of 4 entry boxes that are available for providing file naming patterns for documents when they are released to Laserfiche. The first and third boxes allow free form text entry, while the 2nd and 4th boxes are dropdown lists containing the names of Kofax Ascent Capture index fields. At Release time, the values are interpreted left to right, and any omitted values are ignored when compiling the filename.

For instance, you could configure the file names for documents released into Kofax to be something like BK_<document_type>_<company name>, as show below:



Under the above scenario, an example output file might be BK_CNB-Account Application_ABC Co.TIF.

An important consideration when selecting fields for use in file naming, is the type of data that might appear in Kofax Ascent Capture index fields. If the selected field(s) contain characters that are invalid in either Windows filenames, or in Laserfiche filenames, an error will result. The release script has character replacement logic for forward slashes ("/") that appear in date fields – it will convert these to hyphens – for instance 01/02/2005 becomes 01-02-2005. However, other unanticipated character values will not be replaced by the release script and will result in errors releasing a given document into Laserfiche.

Default document names: If file naming pattern values are omitted, the Release script will use literal "KFX_", followed by the first and second Kofax Ascent Capture defined index fields for file naming. If only a single index field is provided in Kofax Ascent Capture, only that field will be used.

Note that Laserfiche has its own internal handling for duplicate file names – appending a value in parenthesis to the filename – for instance: *INV_456-77-8910_ABC Co* ***(2)****.TIF.* Likewise, the Release script will handle duplicate file names according to how the Increment/Overwrite/Append options are defined, as discussed below.

The Field Mapping Window:
Mapping between Kofax fields and corresponding Laserfiche index fields is performed within the Field Mapping window (yellow), using point and click operations to associate Kofax fields on the left, with corresponding Laserfiche Template fields.

Figure 2: The field mapping window.

Clicking on any of the blue <unassigned> regions will bring up the Laserfiche field selection window, as shown below:

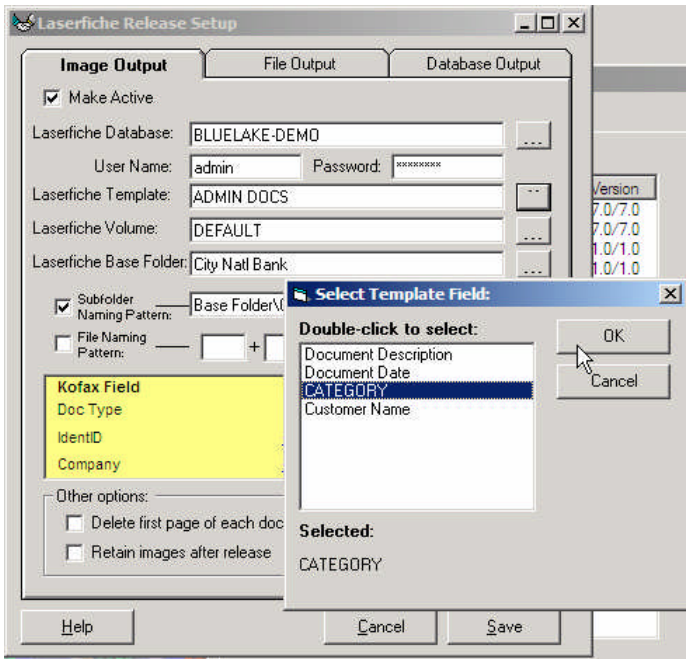


Figure 3: The field selection window.

With the **Select field** dialog displayed, double-click to select a Field from the list, or alternately, single-click and click "OK".

Perform this operation for each of the Kofax index fields that should be used to populate Laserfiche template fields.

Other Options:

Delete First Page of Each Doc
When checked, the first page of each document will be discarded prior to releasing the document into Laserfiche. This is useful for non-Kofax style coversheets, where information from the coversheet is needed beyond the initial Kofax scan and separation step.

Retain Images after release
When checked, the image files released to Laserfiche will be retained in the Windows Temp folder (C:\TEMP\KFXTOLFAPI) after the release into Laserfiche.

Release as PDF:
When checked, documents will be released as PDF files into Laserfiche. For this to work, the Kofax Batch definition must also contain a PDF generation step, and "Enable Kofax PDF Generation" must also be selected within Properties for the given document class within Kofax.

OCR:
The OCR option contains a dropdown list with two options: Kofax and LF.

When **Kofax** is selected, OCR text can be generated from Kofax and released into Laerfiche. In order to use this option, an OCR step must also be included in the Kofax batch definition. Note that when using Kofax-generated text, OCR searches in Laserfiche will locate the correct document and page, but they will lack the light-blue-highlighted text entries that are visible when you use Laserfiche's OCR engine.

When **LF** is selected, Laserfiche OCR will be triggered for each document as it is being released into Laserfiche. Note that this will cause the release of each document to take incrementally longer, based on the number of pages that need to be OCR'd in Laserfiche for the document. This is useful when only a subset of documents require full-text OCR – otherwise this setting can be made as an Import option in Laserfiche, that will apply to all documents imported into Laserfiche from all source, in addition to the release form Kofax.

When complete, the configuration window might look something like the following (see next page).

Click **Save** to save the changes, and **Close** to close the Kofax Release Script configuration window.

Make sure to **Publish** the batch definition in Kofax to make the configuration changes complete.

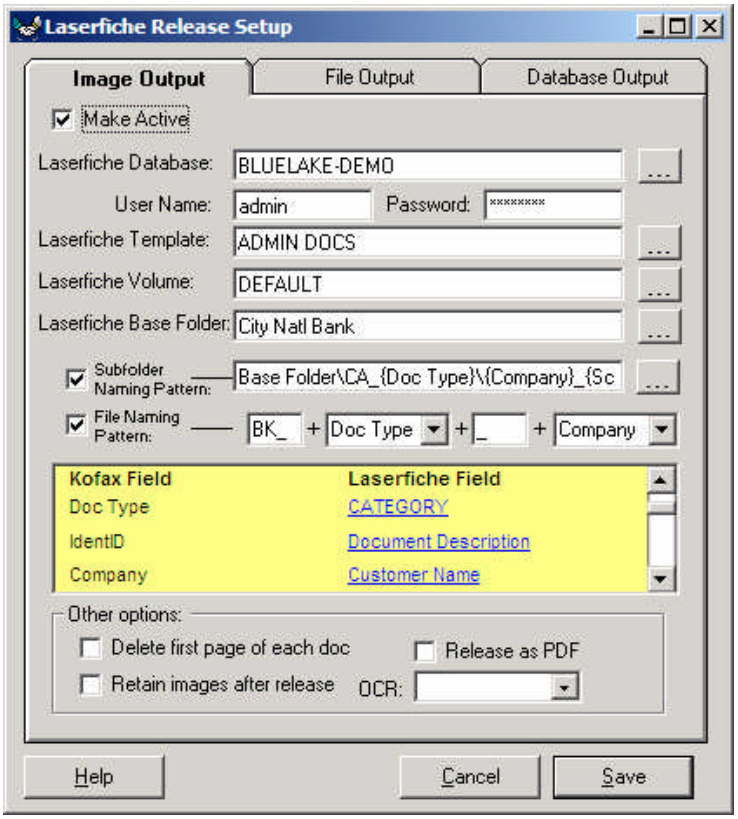


Figure 4: The completed Laserfiche Output configuration

File Output configuration for the Direct Release script is identical to the Standard Release Script – see Page 8 for further instructions.

Database Output configuration for the Direct Release script is identical to the Standard Release Script – see Page 11 for further instructions.