eSign Cloud
System Administration: Archiving and Imaging

Using this Guide

The self-paced learning approach to the implementation of IMM eSign provides an institution with control over the pace at which its employees will learn the materials needed to understand, implement, utilize, and support their solution.

This guide serves as a reference tool as well as a companion guide to the third lesson in Stage 3: System Administration—Archiving and Imaging.

You should watch the video located on the lesson page and use this document as a reminder of what you learned and perhaps a place to make notes and identify areas of question or concern.

The guides in this Stage will also include recommended activities for steps that should be taken when setting up your eSign solution.

The lessons in Stage 3 will enable you to:

- Configure many elements your IMM eSign Cloud solution with the exception of Templates/Attachments
- Continue making decisions about how your users will interact with eSign
- Continue making decisions about how your customers will interact with eSign
- Understand the options in Adobe Sign that will affect the remote signing experience

Overview

There are several considerations when it comes to the final step in the eSignature process – the archiving of the signed documents to your imaging system. In this Lesson, we explore IMM eSign's flexible and configurable architecture, which we introduced in a previous lesson, and set the stage for you to start designing your solution.

As a reminder, the very high-level process flow of eSign consists of the Signing Processes which are managed by eSign and, when remote, Adobe Sign. Once all signing ceremonies are complete, all documents, including the audit files, are organized by IMM eSign and moved to a server in your institution's environment. A copy of the documents and the data are stored in the eSign cloud for a duration set by you in the General Settings. Any documents sent for remote signature will be stored in the Adobe cloud for a period determined by you, and that setting will be discussed in a lesson devoted to Remote signature.

Finally, the documents and data that are downloaded to your institution's server will be available for archiving to your imaging system.
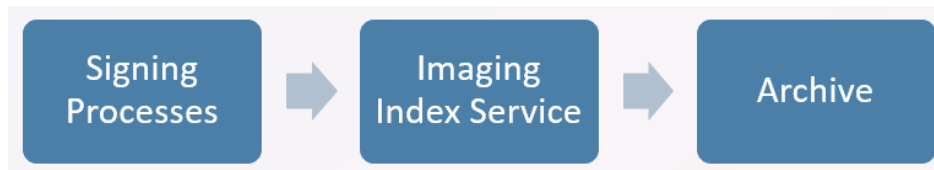
The key elements of this lesson are:

- A review of archives and the overall process leading to the archiving of documents to an imaging system
- Discussion and exploration of indexes
- Deep examination of the Imaging System Settings screen and options

And after watching the video you should:

- Fully understand the default archives the come with any IMM eSign system
- Be prepared to discuss your imaging settings with your IMM Solution Specialist
- Be prepared to discuss your imaging process and requirements with your imaging vendor
- Set up indexes and imaging settings and take note of any questions or areas of confusion

Activity Checklist

- Watch the Lesson 3 video
- Review the information you entered in the Implementation Workbook regarding documents, indexes, and imaging systems (Documents tab of workbook) and make updates, changes, additions as needed
- Go into the Index Fields and Imaging Systems areas of Administration and explore the settings and options to familiarize yourself with them. Take note of any questions or concerns you may have

Indexes

Index fields play a major role not only in the processing, categorization, and retrieval of documents and sessions while they are in eSign, but also in the storage of documents in your imaging system.

Index fields, or indexes, fall into three main categories, IMM standard indexes, FI level indexes, and Document specific indexes.

There are several IMM **standard** indexes. Three of them are displayed on the Index Fields Maintenance Screen which we are about to look at and they are:

- IMM Date
- IMM Time
- IMM Transaction ID

There are a few other IMM standard indexes which are available for use in file naming and image archiving as well as email template creation (which will be covered in a future lesson) and they are:

- Archive Document ID
- Document Set Name
- Document Name
- Document Path

FI level indexes are created and controlled by the Institution. IMM eSign comes with several of these fields as defaults, but not all will be relevant to your environment. The default values include

- Full Name
- Account Number
- Tax ID
- Sub Account Number.

If you do not need these or call them by different names, you can edit their labels and other specifics about them as we'll see below. Institutions can add up to **twenty (20)** different index fields in addition to the 3 standard IMM fields (Date, Time, and Transaction ID)

Lastly there are Document Indexes. This refers to the ability to assign specific index fields to specific documents to address unique archiving situations.

Index Field Maintenance

The Index Fields Maintenance page is accessed from the Administration Menu.

The two buttons on the top right are used to add a New Index Type and to Delete an index type. Though the option exists to delete the three standard index fields, this is not recommended.
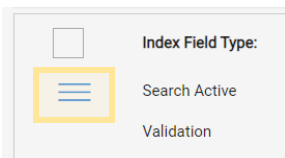
Below the three IMM fields you will notice the standard provided fields. The main difference visually is that you will see the reorder icon on the fields that are not the IMM fields. You can click and drag on this "handle" to change the order of the FI fields if you like. This will change the order of the fields in the search column when a user is searching for a session. So, it could be helpful to have the most used index for searching at the top.

Components of an index field.

Index Field Type is predominantly an internal name. Because it is a database identifier, once it has been entered, it is not changeable. Additionally, it cannot contain spaces, but rather only letters, numbers, hyphens, periods, or underscores

Index Field Title is required and will display as the value label when users are searching for or viewing documents or sessions.

Max Length is the maximum number of characters that can be entered in a field.

Search Active and **Search Completed** determine whether this field will display to the user by default in the search column. (Note, users will still be able to use these values to search under an "Advanced Search" option.)

The three validation fields work to ensure that values captured into or entered into fields meet certain criteria.

When validation requirements are not met, the associated document or documents cannot be processed, and the user will see an indication on their screen. This will be covered in the User Training lessons.

The options for validation types are displayed in the **Validation** drop down menu and include Alphanumeric, Alphanumeric or Empty, Date, Numeric, Numeric or Empty, and Custom.

The **Validation Message** will appear on the user's screen when the value in the index field does not meet the requirements.

And the Validation Value is a regular expression that determines what the allowable characters are – here are some examples:

Alphanumeric	^[A-Za-z0-9]+$
Alphanumeric or Empty	^[A-Za-z0-9]*$
Date	^\d{1,2}\/\d{1,2}\/\d{4}$
Numeric	^[0-9]+$
Numeric or Empty	^[0-9]*$
Custom	Any Regular Expression

If you click in any of the blank space in the Index configuration line, more options open up:

Dictionary Code is only used in certain situations for certain host and imaging systems where XML is used, it is unlikely you will have an option here. This will say TeSign Documents – TeSign is an older moniker we use to use at IMM.

Index Field Name represents the corresponding name in the dictionary. With only TeSign this will default to the Index Field Type name above.

Default Value can be used if a certain index type might have a standard value, but still could be changed during the process. E.g., maybe this is a system name or number that is used for archiving purposes. This is not frequently used.

Use for Imaging represents whether this value will be available in the configuration of archive files. This defaults to ON.

Display Index: When this is On, the index will display to the user when they expand details on a document in Session Details, Search Active results, and Search Completed results.

External Index Title is used with specific Host/Imaging system combinations to match XML field names. If blank, the Index Field Type name is used.

Imaging Index Title is also used only in specific circumstances to label a field name in a generated XML for the imaging system. When used, the Imaging Index Title is displayed instead of the Index Field Name in the generated XML output.
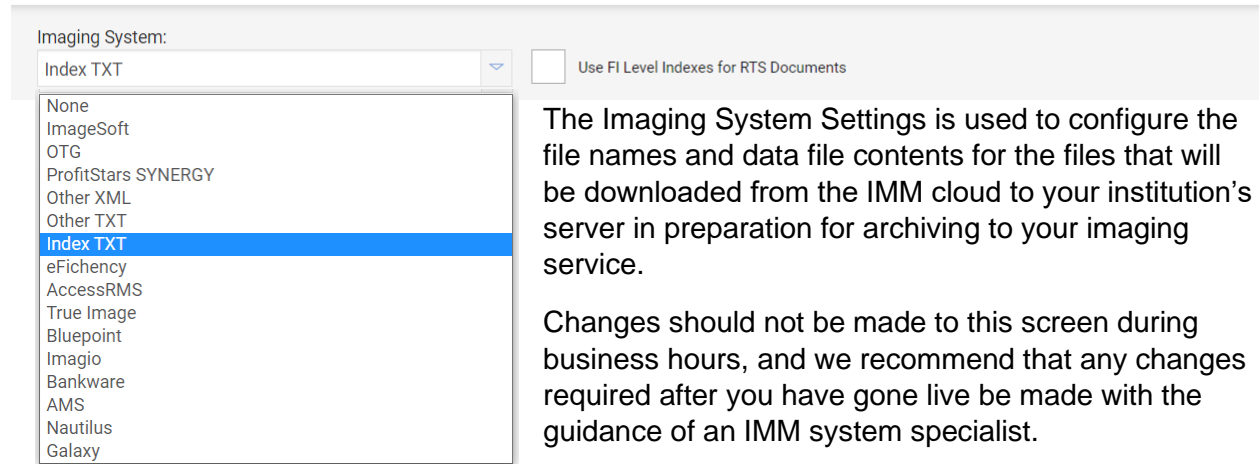
Functions – Custom functions may optionally be used to modify the data stored. You can replace characters, delete characters, change date formats, etc. Functions are applied in order: Custom Function 1, Custom Function 2, Custom Function 3, Custom Function 4. Functions are generally used to address unique situations and it is recommended that you work with your IMM solution expert if you have a need for these functions. There is additional information available in the online documentation. Simply search by "Custom Functions."

After making any changes to the index configuration, be sure to click **Save** before navigating away from the page.

Archiving to Imaging Systems

Facilitating the moving of your signed documents to your imaging system is a key component of the IMM eSign product and our Implementation Teams are ready to help you. That said, we are just a *facilitator* in the process. As discussed previously, it is imperative that you understand any requirements of your imaging system, acquire any necessary modules or ancillary products that may be needed, and coordinate with your imaging system team. The earlier this process is started, the better.

Imaging System Settings

The Imaging System Settings is used to configure the file names and data file contents for the files that will be downloaded from the IMM cloud to your institution's server in preparation for archiving to your imaging service.

Changes should not be made to this screen during business hours, and we recommend that any changes required after you have gone live be made with the guidance of an IMM system specialist.
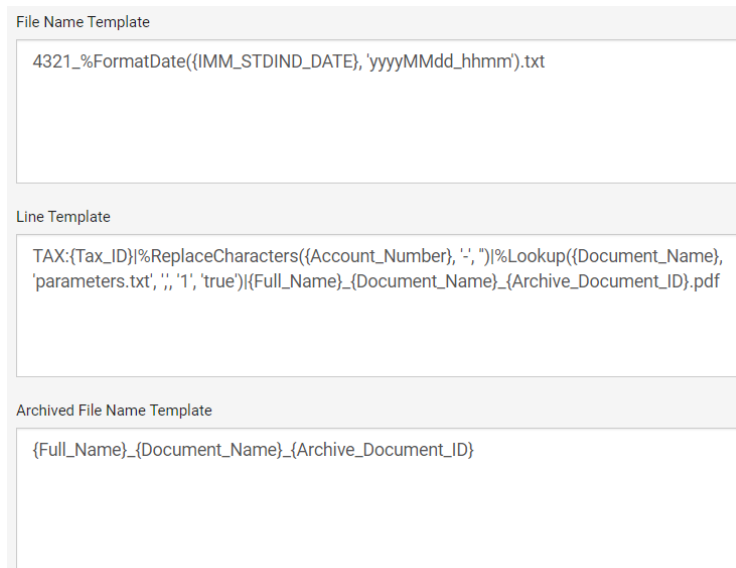
In the drop-down menu there are multiple Imaging System templates that can be used for certain integrations and circumstances. For our purposes, we will use one of the most employed imaging system settings, **Index TXT**. Your IMM Specialist will happily guide you in your decision-making process.

On the screen we see there are three items that will be configured.

File Name Template is the NAME of the Index File (that is, the file that contains the index values for the archive document). The import mechanism of the imaging system will be set up to "expect" a certain file name or file name structure.

Line Template is the structure of the information on each line of the Index File – one line equals one document. This may contain any of the values from the available indexes list and static values, if needed. Each line will also contain the file name of the archive file as well, which we set in the 3rd section.

Archived File Name Template is the file name applied to the archive-ready PDF. This file name can contain static values or available indexes but MUST include either the Archive_Document_ID system value OR BOTH the Document_Name and IMM_Standard Time index values. These will ensure each archive file name is unique.

When constructing the three values, you use Available Indexes and Available Functions as needed. Expanding each will display the options below them:
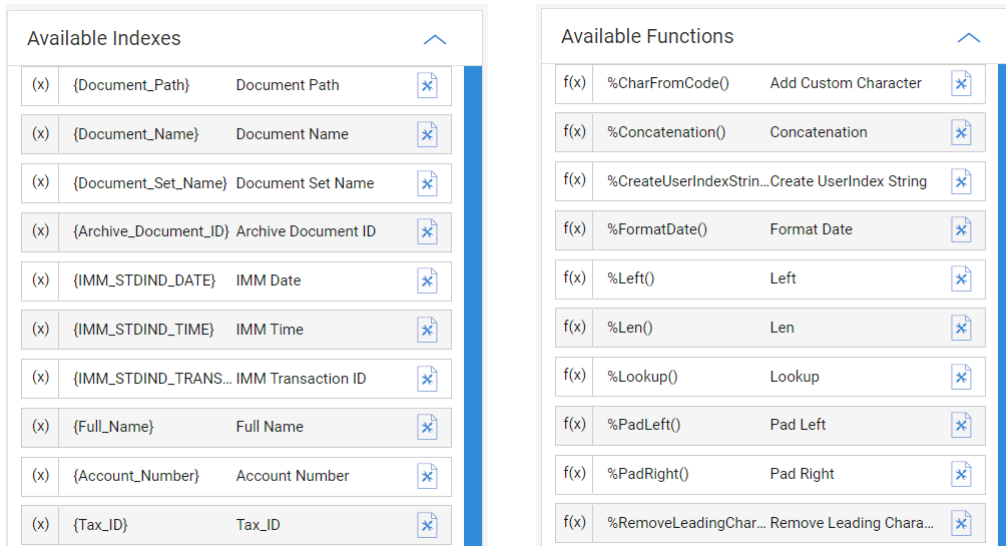
The options in the **Available Indexes** list will reflect additions made on the Indexes page discussed above. The **Available Functions** are used to manipulate index values, if necessary, to ensure they are in the correct format for the imaging system.

Consider this scenario:

File Name Template

The imaging system vendor has indicated that the index files must be named with the institution number (e.g., 4321) followed by an underscore, then the current date in the format 4-digit YEAR 2 digit MONTH 2 digit DAY followed by an underscore, then the time in HOUR MINUTE.

To set that up, in the File Name Template box, type 4321 and an underscore.

From the Available Functions list choose Format Date and click Copy Imaging Index. This function appears where the cursor is located: %FormatDate(dateIndex, format)
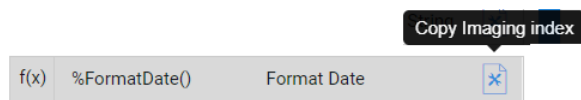
Replace *dateIndex* with the IMM System Date copied from the Available Indexes list.
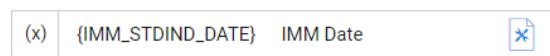
Then enter the format yyyyMMdd_hhmm in place of the word *format* in single quotes.

Lastly, add .txt at the end since this will be a TEXT file. The result looks like this:

```
4321_%FormatDate({IMM_STDIND_DATE}, 'yyyyMMdd_hhmm').txt
```

Note: clicking on a function in the Available Functions list will bring up basic information on how to use that function.

Archived File Name Template

The imaging system vendor doesn't specify what the archive file name should be, but our institution has decided they'd like to have the consumer's name and the document name in case they need to find files by file name.

To set that up, with the cursor in the Archived File Name Template field, select Full Name from the Available Indexes and click copy, then enter an underscore, then select Document Name also from the Available Indexes and click copy and enter an underscore. Lastly, since the file name must be unique, add the Archive Document ID to the end. The result looks like this:

```
{Full_Name}_{Document_Name}_{Archive_Document_ID}
```

Line Template

The imaging system vendor would like values separated using a PIPE symbol (|) and requires that the account number, the document name, and the archive file name are in each line. Anything else we might add would be ignored by the import tool.

Because the account numbers, when imported into the imaging system, cannot contain any dashes, but the values captured from documents in eSign may contain dashes, a function must be used to remove dashes. Place the cursor in the Line Template box and Copy the ReplaceCharacters function. The function will look like this:

```
%ReplaceCharacters(index, oldValue, newValue)
```

Highlight the word *index* and copy the Account Number from the Available Indexes to replace it.

Insert a dash in single quotes for the oldValue, and then just two single quotes for the newValue (indicating no value). The result will look like this:

```
%ReplaceCharacters({Account_Number}, '-', '')
```

Additional guidance on the Available Functions can be found in the online documentation using the term Available Functions.

The second field is the document name, so first add a PIPE (|) character. Since the document name in eSign is not the same as the document name in the imaging system, use the Lookup function to swap out the name. In eSign we use a file called Parameters.txt to map eSign document names to imaging system document names when necessary. Your IMM Specialist can help you set that up. To utilize the mapped file copy the Lookup function to the line template:

```
%Lookup(index, fileName, separator, columnNumber, createFlag)
```

Replace *index* with Document Name, *fileName* with 'Parameters.txt', *separator* with a comma, *columnNumber* with the number 1, and *createFlag* with the word true.

```
%Lookup({Document_Name}, 'parameters.txt', ',', '1', 'true')
```

IMM/eSign
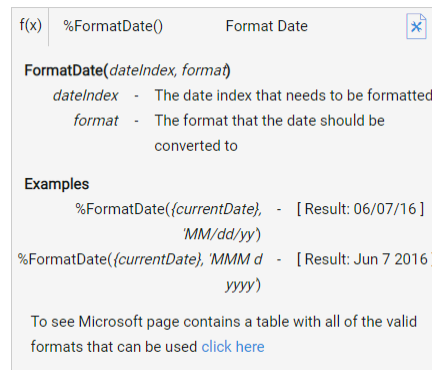
The Parameters.txt file simply contains lines with the eSign document name COMMA the imaging system document name (e.g., DIRECT_DEPOSIT, Direct Deposit). Note that **separator** is the character used in the parameters file to separate the values. The *columnNumber* is the column containing the replacement value (this being something techy, we start counting columns with zero, so the first value in each line is column zero and the second value, the one we want, is column 1). The *createFlag* determines what to do if the search value (namely the Document Name index) is not found. If this is set to 'true' the system will use the existing Document Name. However, if the process of indexing should fail if the replacement value is not found, set this to 'false'.

The last element in the Line Template is the archive file name. Copy the string in the Archived File Name Template field and add .PDF. The final entry will look like this:

```
%ReplaceCharacters({Account_Number}, '-', '')|%Lookup({Document_Name},
          'parameters.txt', ',', '1', 'true')|
     {Full_Name}_{Document_Name}_{Archive_Document_ID}.pdf
```

Then click SAVE.

If you would like to test or preview a function, you can add a sample value by clicking on the appropriate available index and entering a test value and then click Preview.

For example, enter an account number with dashes in it and then click Preview:
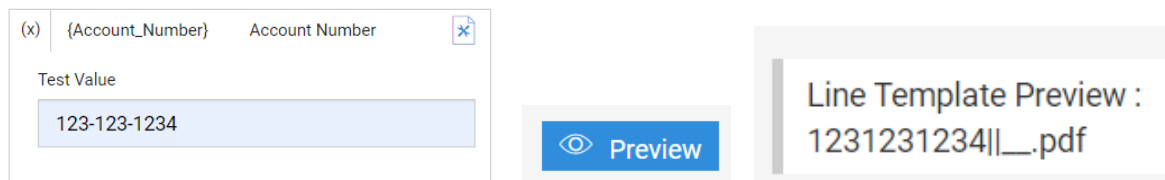
Remember, you are not alone to figure this all out. The IMM Specialists are ready, willing, available, and highly experienced at setting up these files for nearly all imaging systems. As you can see there are many different options so the **most important step** is knowing what your institution and your imaging system need – then we can help you configure the solution.

Imaging Index Service

Once a session is sent for archive whether automatically because it had a remote signature component, or manually when your user clicks the archive option, IMM will name the archive files themselves, and start assembling the index file. It will add a line for each archive PDF.

On a scheduled interval, a server in **your environment** will poll the IMM cloud using the Imaging Index Service. This service is a small piece of software that was installed during your installation activity and that runs according to a schedule you set up using Windows Task Scheduler.

The service knows where to look (namely the IMM cloud) and where to place the files (namely a network location in your environment). The service can run at whatever interval you deem necessary.

IMM *e*Sign

Once the archive ready files have been copied down it will be up to you to ensure your imaging service tool can access them and import them as needed – and again, we can assist you in determining the specifics of that process.

Recommended Activities

Determine what index values your institution will require for archiving to your imaging system.

Document the document names as they appear in your imaging system.

Determine what specific addons, set-ups, licenses, are needed from your imaging system vendor to enable document import from eSign.

Go into the Index Fields and Imaging Systems areas of Administration and explore the settings and options to familiarize yourself with them.

Note any questions or concerns you have so that you can ask your IMM Product Expert during the consulting/training session.

IMM eSign