



KYOCERA  
DMConnect PRO

# SET UP AND OPERATION GUIDE



HyPAS

# DMConnect / DMConnect PRO

**Version 3.0**

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KYOCERA Document Solutions America, Inc.  
Software Solutions Group



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# 1. DMConnect

## 1.1 Software

KYOCERA DMConnect is a workgroup document management system that allows an organization to craft document workflows, track the workflow process, and manage save documents to best suit their business needs. To accommodate the widest range of business workflow needs, DMConnect is packed with several high-quality image processing functions, sophisticated document routing capability, and advanced integration capability with custom scripting.

There are three versions of the DMConnect HyPAS Application available, all with different functionalities:

DMConnect	DMConnect Powered by OmniPage	DMConnect PRO Powered by Nuance
<ul style="list-style-type: none"><li>• Basic OCR (Basic Searchable PDF)</li></ul>	<ul style="list-style-type: none"><li>• Basic OCR (Basic Searchable PDF)</li><li>• <b>Advanced OCR (Searchable PDF)</b></li><li>• <b>MS Word Conversion</b></li><li>• <b>MS Excel Conversion</b></li><li>• <b>MS PowerPoint Conversion</b></li><li>• <b>MS XPS Conversion</b></li></ul>	<ul style="list-style-type: none"><li>• Basic OCR (Basic Searchable PDF)</li><li>• Advanced OCR (Searchable PDF)</li><li>• MS Word Conversion</li><li>• MS Excel Conversion</li><li>• MS PowerPoint Conversion</li><li>• MS XPS Conversion</li><li>• <b>2D Barcode Recognition</b></li><li>• <b>Forms Recognition</b></li></ul>

## 1.2 This Guide

This document describes the components, functions, installation requirements and setup steps required to deploy all versions of DMConnect effectively.

## 1.3 What's New in DMConnect and DMConnect Pro 3.0

- Automatic captures sources such as Hot Folder, Email, and FTP
- Microsoft Outlook plug-in to send email attachments directly in to DMConnect workflows
- Built-in web-based Document Management System
- New User Interface
- New Administrator Utility for DMConnect configuration

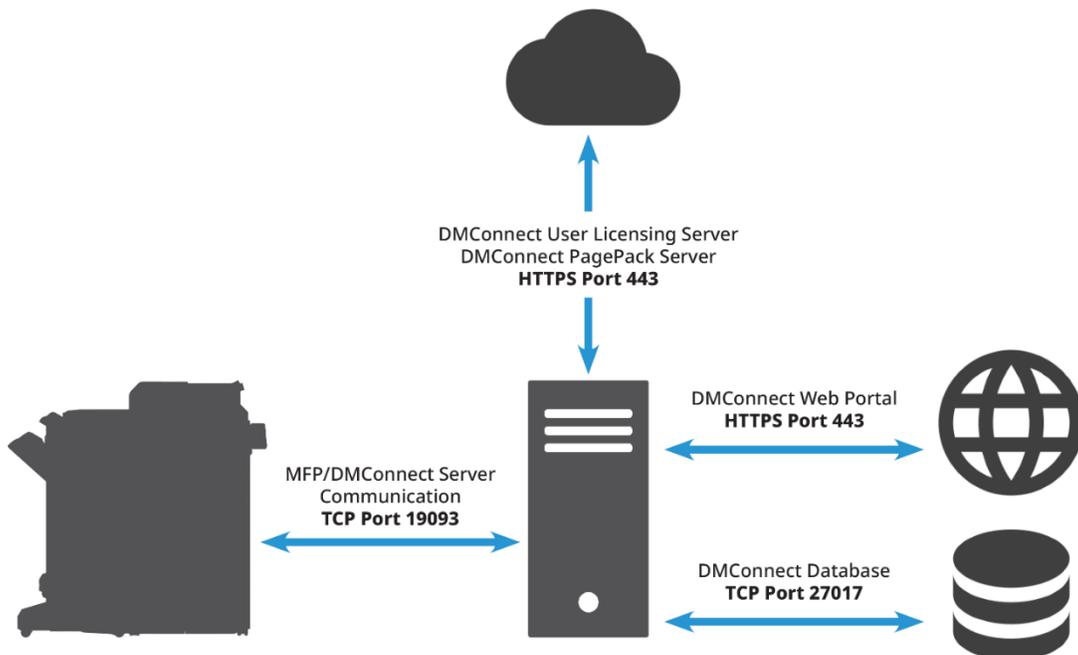
## 1.4 System Design

### 1.4.1 Components

DMConnect is comprised of four Windows services that are configured to execute in the background automatically after server start up.

Name	Windows Service Name	Description
DMConnect MongoDB Database	DMConnect Database	Storage of document metadata
DMConnect Job Processor Service	DMConnectJobProc	Responsible for coordinating image processing and delivery tasks.
DMConnect Scan Service	DMConnectScan	Allows Kyocera MFPs to scan documents to DMConnect
DMConnect Web Service	DMConnectWebServer	Runs the DMConnect Web Portal

### 1.4.2 Network Architecture



The following ports and protocols are used as default values when initially installing DMConnect 3.0. Some protocols can be changed via the DMConnect Administrators Utility.

For Components that use SMTP settings the port and protocol will depend on the SMTP server being used.

For Components that use FTP or similar settings the port and protocol used will depend on the FTP server as well.

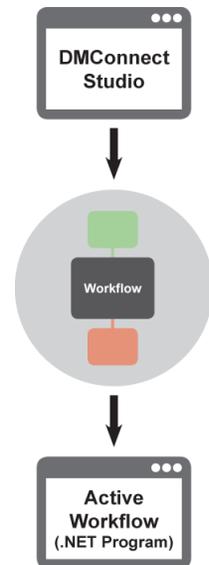
- **MFP/Server Communication:** TCP Port 19093 (default)
- **DMConnect Portal:** HTTPS Port 443
- **DMConnect Database:** TCP Port 27017 (default)
- **DMConnect User Licensing Server:** HTTPS Port 443
- **DMConnect Page Pack Server:** HTTPS Port 443

### 1.4.3 Active Workflow

Workflows are designed using the [Workflow Studio](#) application which provides a graphical user interface for designing workflows easily, with drag-and-drop gestures.

DMConnect Active Workflow technology transforms a workflow into a .NET program. This .NET program handles all image processing and routing tasks for document workflow.

This architecture leverages the full capability of the .NET framework from within the workflow. Using this capability, the workflow can be deeply integrated with the customer's core business processes.



## 1.5 System Requirements

Not all Windows Environments are supported and depending on a variety of factors, KYOCERA DMConnect may not be the ideal choice. Please read the following limitations and considerations carefully before deciding to implement KYOCERA DMConnect.

### 1.5.1 Supported Client Operating Systems

**DMConnect 3.0 requires a 64-bit platform version** of one of the following operating systems:

- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2008 R2 SP1

***NOTE: Operating Systems not on this list or no longer supported by Microsoft are not supported by DMConnect 3.0.***

### 1.5.2 Supported Web Browsers (DMConnect Document Portal)

- Google Chrome 75.0 and newer
- Mozilla Firefox 67.0 and newer
- Microsoft Edge 44.17763 and newer

### 1.5.3 Minimum Hardware Requirements

To ensure proper functionality, please make sure your server meets or exceeds the following specifications:

- 2 GHz or faster processor
- 4 GB of RAM
- 5 GB of available hard disk space
- A network card installed and configured to allow DMConnect to access the internet for external capture sources, Page Pack licensing, and the Web Portal.

***NOTE: A network connection that has access to the public internet is required if using Automatic Capture Sources or the DMConnect Web Portal.***

### 1.5.4 Other Software Pre-requisites

- Microsoft .NET version 4.6.2 is required
- Integration with the following versions of Microsoft Excel is supported:
  - Excel 2013
  - Excel 2010
  - Excel 2007
- Integration with following versions of Microsoft SharePoint is supported:
  - SharePoint 2016, SharePoint Online (Microsoft Office 365)
  - SharePoint Server 2013 Standard and Enterprise Edition
  - SharePoint Foundation 2013
  - SharePoint Server 2010 Standard and Enterprise Edition
  - SharePoint Foundation 2010

***NOTE: Using the DMConnect SharePoint access feature to access a SharePoint Server may expend a Client Access License depending on server configuration.***

### 1.5.5 Supported MFP Models

For a full list of support MFP models, please refer to the Solutions Compatibility Chart on KDACentral.com.



## 2. Licensing

DMConnect's licensing model is designed to be easy to deploy, easy to scale and proactive. There are three components to the licensing model: MFP license, Page Packs, and User licenses.

### 2.1 MFP License

DMConnect PRO requires the purchase of a software license from an authorized KYOCERA or Copystar dealership.

#### 2.1.1 On-line License Activation

DMConnect uses the same activation method as the Card Authentication Kit, Teaching Assistant, Data Security Kit and the Document Guard Kit. Following the purchase of a license certificate, the Product ID Number is sent in an email message. You will need these items as well as the MFP Serial Number when you access the License Page from KDACentral.

You will be issued a unique Activation Key once you register your option. Print this page and input this Activation Key number on the panel of **your HyPAS-Enabled MFP or HyPAS-Capable MFP** to activate it.

What's Required:

- License Certificate
- Product ID Number
- MFP Serial Number

1. Log in to the License Key Service on KDACentral.com
2. Enter the Product ID from the License Certificate, Click Next.

The screenshot shows the 'License Key Issue System' web interface. At the top, there is a progress bar with steps: 'Enter Product ID', 'Verify product', 'Enter Machine No.', 'Re-enter Machine No.', 'Verify your entry', and 'Issue License Key'. Below the progress bar is a language dropdown menu set to 'English'. The main content area contains a thank you message and instructions for entering the machine number. A section titled 'Enter Product ID' has a text input field with the value 'GC0S . 22HB . 4FC2 . N2K3'. A 'Next' button with a right arrow is located at the bottom right of the form.

3. Your Product will be verified, Click Next.

**License Key Issue System**

Enter Product ID >> **Verify product** >> Enter Machine No. >> Re-enter Machine No. >> Verify your entry >> Issue License Key >>

**Verify product**

Your purchased product is as below.

Product Name	Printed Document Guard Kit (A)
Product ID	GC08-22HB-4FC2-N2K3

If it is OK, click Next.

[Back](#) [Next](#)

4. Enter the MFP Serial Number, Click Next.

**License Key Issue System**

Enter Product ID >> Verify product >> **Enter Machine No.** >> Re-enter Machine No. >> Verify your entry >> Issue License Key >>

**Enter Machine No.**

Enter the machine No. that you have written in License Certificate.

Machine No. :

If it is OK, click Next.

[Back](#) [Next](#)

5. Re-enter the MFP Serial Number to confirm it, Click Next.

**License Key Issue System**

Enter Product ID >> Verify product >> Enter Machine No. >> **Re-enter Machine No.** >> Verify your entry >> Issue License Key >>

**Re-enter Machine No.**

Enter the machine No. again to confirm it.

Machine No. :

If it is OK, click Next.

[Back](#) [Next](#)

- Your Information will be verified, Click Next.

**License Key Issue System**

Enter Product ID >> Verify product >> Enter Machine No. >> Re-enter Machine No. >> **Verify your entry** >> Issue License Key >>

**Verify your entry**

Verify your entry so far.

Product Name	Printed Document Guard Kit (A)
Product ID	GC0S-22HB-4FC2-N2K3
	SAMPLE
Machine No.	SPL8811406

If it is OK, click Next.  
The license key will be issued.

[Back](#) [Next](#)

- Your License Key is issued.

**License Key Issue System**

Enter Product ID >> Verify product >> Enter Machine No. >> Re-enter Machine No. >> Verify your entry >> **Issue License Key** >>

**Issue License Key**

The license key has issued.

Product Name	Printed Document Guard Kit (A)
Product ID	GC0S-22HB-4FC2-N2K3
	SAMPLE
Machine No.	SPL8811406
License Key	3171-6246-4236-9163-5966

Date of Issue : March 23, 2016 1:58:31 AM JST

Write the above license key in the space provided in License Certificate.  
Print this screen and keep it in a safe place.

[Print](#) [Continue to issue other license key.](#)

Now, the issuing process is completed.

- Print the Page and input the License Key number on the panel of your HyPAS-enabled MFP to activate your Device.

## 2.2 Trial Periods

### 2.2.1 MFP License Trial

The DMConnect HyPAS Application comes with a 60-day trial period (2 x 30-day trials) to allow customers to try DMConnect without the purchase of an official license. Once the first 30-day trial has expired the second 30-day trial need to be manually activated. Once both 30-day trial expire a license will need to be purchased in order to continue using the DMConnect HyPAS Application.

### 2.2.2 DMConnect Server Trial

Customers can request a 60-day trial (2 x 30-day trials) for the DMConnect Server application. during which time all aspects and features of the DMConnect application will be available. For

information on how to activate a Trial License please refer to the [Trial Licensing](#) section of this document.

***NOTE: Only one trial per device is permitted.***

***NOTE: Once the trial is activated it cannot be reverted or re-activated. Once the trial period has expired Page Packs and/or User Licenses will need to be purchased in order to continue using Automatic Capture Sources or the DMConnect Web Portal.***

***NOTE: If an official Page Pack License or User License is installed during the trial period, the trial will automatically expire, and all Trial pages left will not be available.***

### 2.3 Page Packs

DMConnect can process documents from any automatic capture source like Hot Folder, Email, and/or FTP using a page licensing system which utilizes purchasable Page Packs. Documents processed through an MFP do not require a Page Pack thus do not subtract from any existing Page Pack counts.

Page Packs can be purchased through the KDA Order Tracking System. **Page Packs are valid for 1-year after their first use** where “first use” means once a single page is consumed out of the Page Pack. After the 1-year period the page pack will become invalid regardless of how many pages are left in the pack. However, multiple Page Packs can be preemptively purchased and installed. The 1-year count will not begin until that Page Pack is used.

There are two types of Page Packs available: **BASIC** and **PRO**.

A **BASIC Page Pack** can be used to process documents through workflows that do not use any OmniPage OCR feature. These features include: Conversion to any Microsoft file format (Word, Excel, PowerPoint, XPS), creating Advanced Searchable PDF's, 2D Barcode Recognition, and/or Forms Recognition. BASIC Page Packs can be purchased in 50,000-page sizes.

A **PRO Page Pack** can be used to process documents through any workflows regardless of the features being used. PRO Page Packs can be purchased in 50,000- and 250,000-page sizes.

Page Packs consume pages based on page count. For instance, if a 50,000-page Page Pack is installed and a workflow produces a 30-page PDF then 30 pages will be consumed leaving a total of 49,970-pages left in the Page Pack. Different file types will also consume pages

differently. TIFF and PDF files consume pages out of the Page Pack at a rate of 1-page per 1-page of the file. PNG and JPG files consume pages at a rate of 1-page per 1-file. All other file formats will consume pages at a rate of 1-page per 1-megabyte of file size.

## 2.4 User Licenses

DMConnect restricts access to the Web Portal to licensed users. Each user that needs access to the Web Port must have a user license assigned to their email address. User Licenses can be purchased through the KDA Order Tracking System. Licenses can be purchased containing 10-User Slots per license. **A User License is valid for 1-year after its activation date** where “activation date” means after the first user is assigned to a user slot. After the one-year period all users on the User License will no longer have access to the DMConnect Web Portal. However, if a second license is installed and available, users from the expired license will seamlessly rollover to the empty license and access to the DMConnect Web Portal will not be interrupted.

### 3. Installation

Installation of DMConnect consists of following applications.

#### 3.1 Files Required

<b>Basic</b>	<ul style="list-style-type: none"><li>• DMConnect 3_x_x.pkg</li><li>• DMConnectInstaller.msi</li><li>• Basic OCR Setup.msi (optional)</li></ul>
<b>Powered by OmniPage</b>	<ul style="list-style-type: none"><li>• DMConnect 3_x_x powered by OmniPage.pkg</li><li>• DMConnectInstaller.msi</li><li>• OmniPage OCR Setup.msi</li></ul>
<b>PRO Powered by Nuance</b>	<ul style="list-style-type: none"><li>• DMConnect 3_x_x_PRO.pkg</li><li>• DMConnectInstaller.msi</li><li>• OmniPage OCR Setup.msi</li></ul>

#### 3.2 MFP Installation

***NOTE: An authorized KYOCERA or Copystar Service Technician is required to perform these steps.***

1. Ensure that the MFP is updated to the latest available firmware level.
2. MFP must be connected to a network port and link lights must be active.
3. MFP must have at least one empty application slot (under System Menu > Applications).

##### 3.2.1 Installation on HyPAS-Capable MFPs (requires SD card)

1. Copy the .pkg file to the root of a clean USB flash drive.
2. At the MFP control panel, open System Menu/Counter > Favorites/ Application.
3. Log in as Administrator when prompted. The default login name is Admin and the default password is Admin (Note: Enter capital A when entering 'Admin' as both login name and password fields are case-sensitive).
4. Press "Application" button.
5. Press "Menu" button.
6. Press "Add" button.
7. Insert USB flash drive into the MFP.
8. A list showing the application will appear.
9. Select DMConnect and press Install.

10. After installation, press “End” to return to the Applications screen.
11. Select DMConnect and press “Menu.”
12. Press “Activate.” The MFP will prompt for confirmation and press “Yes”.
13. After DMConnect is activated successfully, it can be executed from the main Application screen (opened by pressing the Application key on the control panel).

### 3.2.2 Installation on HyPAS-Enabled MFPs

1. Copy DMConnectPRO.pkg files to the root of a clean USB flash drive.
2. At the MFP control panel, open System Menu > Applications.
3. Log in as Administrator when prompted. The default login name is Admin and the default password is Admin (Note: Enter capital A when entering ‘Admin’ as both login name and password fields are case-sensitive).
4. Press the “Add” button.
5. Insert USB flash drive into the MFP. A list showing the application will appear.
6. Select DMConnect and press “Install.”
7. After installation, press “Close” to return to the Application screen.
8. Select DMConnect and press “Activate.” MFP will prompt for a confirmation.
9. Press “Yes.”
10. Check the status.
11. After DMConnect is activated successfully, it can be executed from the main Application screen (opened by pressing the Application key on the control panel).

### 3.3 DMConnect Server Installation

All versions of DMConnect (including DMConnect PRO) use the same server application. Depending on the package file version of DMConnect you are using, certain features may not be available.

1. Double click the DMConnect .msi file to begin installation.
2. Read the DMConnect license agreement and check the box next to *I accept the terms in the License Agreement* if you accept the license terms, then click the “Install” button.
3. The installer will install any necessary pre-requisites and files.
4. When the installer completes you can click the finish button to complete the installation process.

### 3.4 Basic OCR Add-On Installation

1. Double click the **Basic OCR Setup.msi** file to begin installation.
2. Read the Basic OCR Add-on license agreement and check the box next to **I accept the terms in the License Agreement** if you accept the license terms, then click the **Install** button.

3. The installer will install any necessary pre-requisites and files.
4. Click the **Finish** button to complete the installation.

### 3.5 OmniPage OCR Add-On Installation

1. Double click the **OmniPage OCR Setup.msi** file to begin installation.
2. Read the OmniPage OCR Add-on license agreement and check the box next to **I accept the terms in the License Agreement** if you accept the license terms, then click the **Install** button.
3. The installer will install any necessary pre-requisites and files.
4. Click the **Finish** button to complete the installation.

### 3.6 Uninstalling DMConnect

To uninstall DMConnect, navigate to **Windows Control Panel > Programs and Features**, find DMConnect in the list of installed applications, highlight DMConnect, then click the **Uninstall/Change** button. The DMConnect Uninstallation Wizard will begin to guide you through the rest of the uninstallation process.

### 3.7 Upgrading from DMConnect 2.0 or earlier

In order to properly upgrade to DMConnect 3.0, previous version of DMConnect must be uninstalled and the server must be rebooted. This is to ensure the older KMScan and KMJobProc services are completely removed and allow of the installation of the new services.



## 4. DMConnect Administration Utility

The DMConnect Administration Utility is used to configure global settings that can be shared with all the workflows in the system.

### 4.1 System Settings

The screenshot displays the DMConnect Administration Utility interface. The window title is "DMConnect Administration Utility". The main navigation bar includes "System Settings" (active), "SERVER/CERTIFICATE", "LDAP", "SMTP", "NOTIFICATIONS", and "FILE SHARES". The "SERVER/CERTIFICATE" tab is selected, showing two sections: "Server Configuration" and "Server Certificate".

**Server Configuration:**

- Host Name:
- Server Port:
- MFP Communication Port:
- DB Port:
- Processing:  (with a red "..." button)
- Failed:  (with a red "..." button)
- Workflows:  (with a red "..." button)

**Server Certificate:**

- Current certificate is valid. Expires 6/26/2022 3:43:37 PM.
- DNS names and IP addresses covered by certificate: (with red "edit", "download", and "refresh" buttons)
- localhost
- DMCServerName
- DMCServerName.MyDomain.local
- 192.168.0.12

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#### 4.1.1 Server Configuration

- **Host Name:** The Host Name of the DMConnect Server.
- **Server Port:** The port that will be used for web communication.
- **MFP Communication Port:** The port used for communication between the MFP and DMConnect server.
- **DB Port:** The port used to connect to the internal MongoDB database (default 27017)
- **Processing Folder:** Folder used as an on-ramp to the DMConnect system and queue.
- **Failed Folder:** Folder to move jobs if they fail.
- **Workflow Folder:** Folder used to house the workflows used in DMConnect.

#### 4.1.2 Server Certificate

A certificate needs to be produced for secure communication with the DMConnect server. Here the administrator can configure and export a self-signed SSL certificate from the DMConnect server to be imported into other clients that need to communicate with it.

- **Certificate Validity:** Informative information regarding the currently configured and used certificate. This will show if the certificate is valid and its expiration date.
- **DNS/IP Addresses List:** List of DNS Host Names and IP Address associated with the current certificate. Administrators can add and remove entries as needed but a new certificate will need to be exported and imported into clients.
- **Generate New Certificate (button):** Used to create a new self-signed certificate when a DNS Host Name or IP Address is added or removed from the DNS/IP Addresses list.
- **Download Root Certificate (button):** Opens a Save-As dialog to download the certificate.
- **Reload (button):** Refreshes the DNS/IP Addresses list which is useful if changes have been made to the list.
- **Save (button):** Used to save any changes made.

### 4.1.3 LDAP

DMConnect Administration Utility

System Settings | SERVER/CERTIFICATE | **LDAP** | SMTP | NOTIFICATIONS | FILE SHARES

Licensing

Groups

Permissions

Integrations

## LDAP Configuration

User

Password

Search Root

Server(IP or Host)

Enable Card Login

Enable Self Registration

Modify with Query Account

LDAP Attribute



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- **User:** Username used to connect to the LDAP server
- **Password:** Password associated with the User account
- **Search Root:** Where in the Active Directory structure DMConnect should begin looking for entries.

- **Server (IP or Host):** The IP Address or Host Name of the LDAP server.
- **Test Connection (button):** Used to test communication between the LDAP server and the DMConnect server.
- **Save (button):** Used to save any changes made.

#### 4.1.4 SMTP

The screenshot displays the 'SMTP Settings' configuration page within the 'DMConnect Administration Utility'. The page is organized into a sidebar on the left with categories like 'System Settings', 'Licensing', 'Groups', 'Permissions', and 'Integrations'. The main content area is titled 'SMTP Settings' and contains several input fields: 'Server' (smtp.gmail.com), 'Port' (587) with an 'SSL Enabled' checkbox checked, 'Sender Name' (UserName), 'Sender Email' (username@email.com), 'User Name' (username), and 'Password' (masked with dots). A red circular button with a test icon is located below the password field. The footer includes copyright information for KYOCERA Document Solutions America, Inc. (Version 1.0.0.0) and the KYOCERA logo.

- **Server:** The FQDN or IP Address of the SMTP server
- **Port:** Port used by the SMTP server
- **SSL Enabled:** Check if the SMTP server is configured to use SSL communication
- **Sender Name:** Name that will appear on the sent email. If using MFP or Third Part Authentication this will be populated by the logged in user's email address.
- **User Name:** Username used to authentication against the SMTP server (if required).
- **Password:** Password associated with the User Name.
- **Test Connection (button):** Used to test communication between the SMTP server and the DMConnect server.
- **Save (button):** Used to save any changes made.

## 4.1.5 Notifications

The screenshot shows the 'DMConnect Administration Utility' interface. The 'NOTIFICATIONS' tab is selected, and the 'Page Licenses' section is active. The 'Send Notifications To:' list contains four email addresses: user01@email.com, user02@email.com, manager01@email.com, and manager02@email.com. A 'Send Test' button is visible at the bottom right of the configuration area.

System Settings | SERVER/CERTIFICATE | LDAP | SMTP | **NOTIFICATIONS** | FILE SHARES

Licensing

Groups

Permissions

Integrations

### Notifications

#### Page Licenses

- Send notification for BASIC
- Send notification for PRO
- Send when remaining pages are less than 1000 pages.
- Send 60 days before license expiration.

#### User Licenses

- Enable expiration date notification

Send notification 30 days before license expiration.

Send Notifications To:

- user01@email.com
- user02@email.com
- manager01@email.com
- manager02@email.com

**Send Test**

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### Page Licenses Notifications

- **Send notification for BASIC:** Check to send notifications about BASIC Page Packs.
- **Send notification for PRO:** Check to send notifications about PRO Page Packs.
- **Send when remaining pages are less than \_\_\_\_\_ pages:** Administrators can configure the minimum number of pages left before a warning email will be sent to users configured in the email list.
- **Send \_\_\_\_\_ days before license expiration:** Configure the amount in days left before a page pack expires before an email is sent to users on the email list.

### User Licenses Notifications

- **Enable expiration date notification:** Configure the amount in days left before a user license expires to send out an email message to users on the email list.

### Send Notifications To: List

Notifications will be sent to each user listed in this list.

## 4.1.6 File Shares

DMConnect Administration Utility

System Settings

SERVER/CERTIFICATE    LDAP    SMTP    NOTIFICATIONS    **FILE SHARES**

	Host	Share name	Domain	Username	Password
Licensing	server01	share01	mydomain.local	username	●●●●●●●●
Groups	server02	share_a	mydomain.local	admin	●●●●
Permissions					
Integrations					

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The File Shares Tab contains a collection of file share information to be used when a workflow is started via the DMConnect Web Portal or the DMConnect Desktop Client and is using a file share destination.

## 4.2 Licensing

### 4.2.1 Users

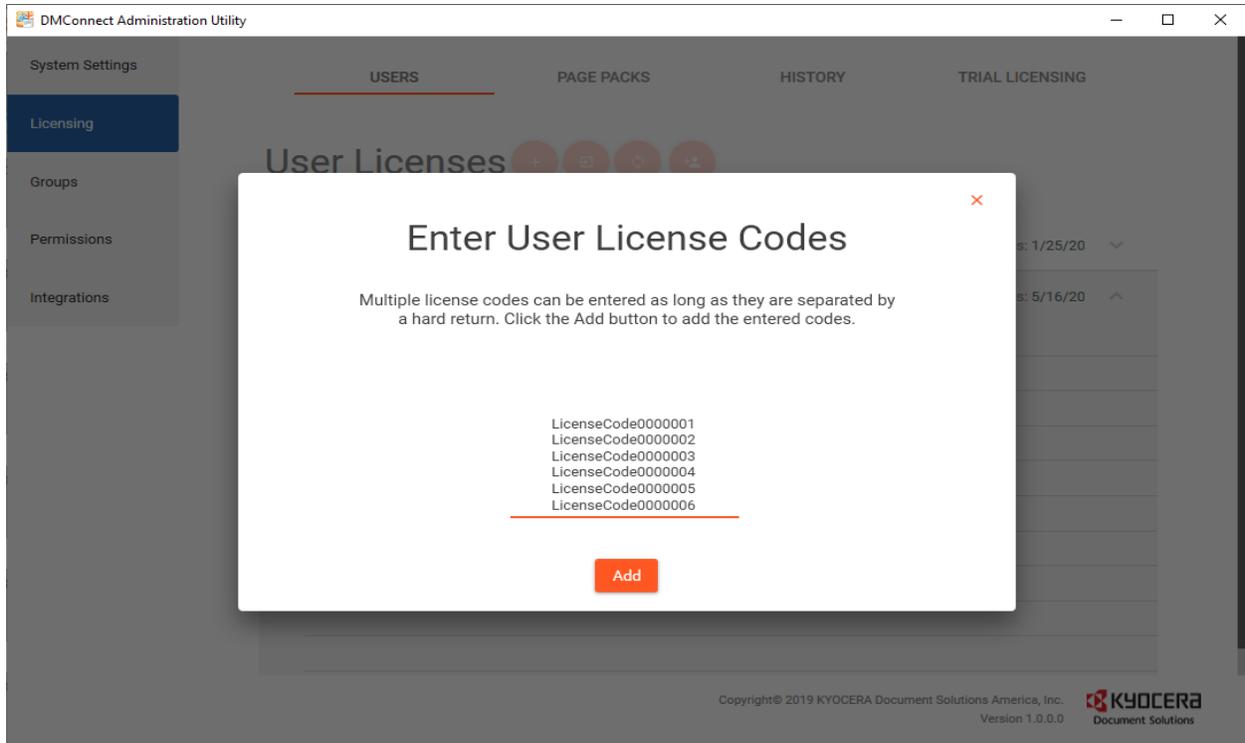
The screenshot displays the DMConnect Administration Utility interface. On the left, a sidebar menu includes 'System Settings', 'Licensing' (highlighted in blue), 'Groups', 'Permissions', and 'Integrations'. The main content area is titled 'User Licenses' and features four red circular action buttons: '+', a document icon, a refresh icon, and a user icon. Below these buttons is a table with two rows of license data. Each row includes a close button (x), a progress bar, the status 'ACTIVE', the number of users (9/10 and 5/10), the activation date and time, and the expiration date with a dropdown arrow. The first row's dropdown is expanded, showing a list of email addresses: 'user01@email.com' and 'user02@email.com'. At the bottom right, the footer contains the text 'Copyright © 2019 KYOCERA Document Solutions America, Inc. Version 1.0.0.0' and the KYOCERA Document Solutions logo.

License ID	Status	Users	Activated	Expires
██████████	ACTIVE	Users: 9/10	Activated: 1/25/2019 9:19:15 PM	Expires: 1/25/20
██████████	ACTIVE	Users: 5/10	Activated: 5/17/2019 12:54:34 PM	Expires: 5/16/20

The User tab is used to import User Licenses, add users to User Licenses, edit users on a license, and remove users from a license. Each row in the list will display the User License, if the license is Active or Inactive, how many users and assigned to the license, date of activation, and date the license will expire.

## Add a User License

1. Click the Add License Button  which will open the Add User License Dialog.
2. Enter one or more User License Codes then click the Add button.



License codes that are successfully activated will be added to the User Licenses List. License Codes that failed to activate will be displayed in another dialog.

User Licenses saved in a CSV formatted file can be imported by clicking the Import from CSV button  which will open a Windows Explorer dialog and allow you to browse to the CSV file.

## Remove a User License

User Licenses can be removed by clicking the gray Delete "X" button to the left of the license code. You will be prompted to confirm the deletion in an effort to avoid accidental deletion.

## Add/Edit/Remove Users

Each User License code is expandable and will display a row per user license slot. Individual users can be added to User Licenses by entering the user's email address in an empty slot. Users are assigned to User Licenses by adding their email address to an empty slot. In the same respect, users can be removed from the User License by removing their email address.

## 4.2.2 Page Packs

DMConnect Administration Utility

System Settings

USERS PAGE PACKS HISTORY TRIAL LICENSING

Licensing

Groups

Permissions

Integrations

Import License Key 

Prevent PRO license from processing BASIC jobs

Key	Type	Total Page Count	Expiration	Remaining Pages	Active
x 	BASIC	50,000	12/18/2019 3:58 PM	31,999	<input checked="" type="checkbox"/>
x 	PRO	50,000			<input type="checkbox"/>

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When using a capture source other than a Kyocera MFP, DMConnect requires a Page Pack be installed. Once a Page Pack is installed it will automatically be used by DMConnect when it is required. As pages are used, they are deducted from the total amount and a history of the page is held in the History Tab for auditing purposes.

The History tab will display an individual Page Pack License's usage history. Administrators can view the date and number of pages that were used and the workflow that used them. Administrators can also filter the search results by entering a specific workflow name or date range.



## 4.2.3 History

DMConnect Administration Utility

System Settings      USERS      PAGE PACKS      **HISTORY**      TRIAL LICENSING

Licensing

Groups

Permissions

Integrations

Search License Key

Workflow

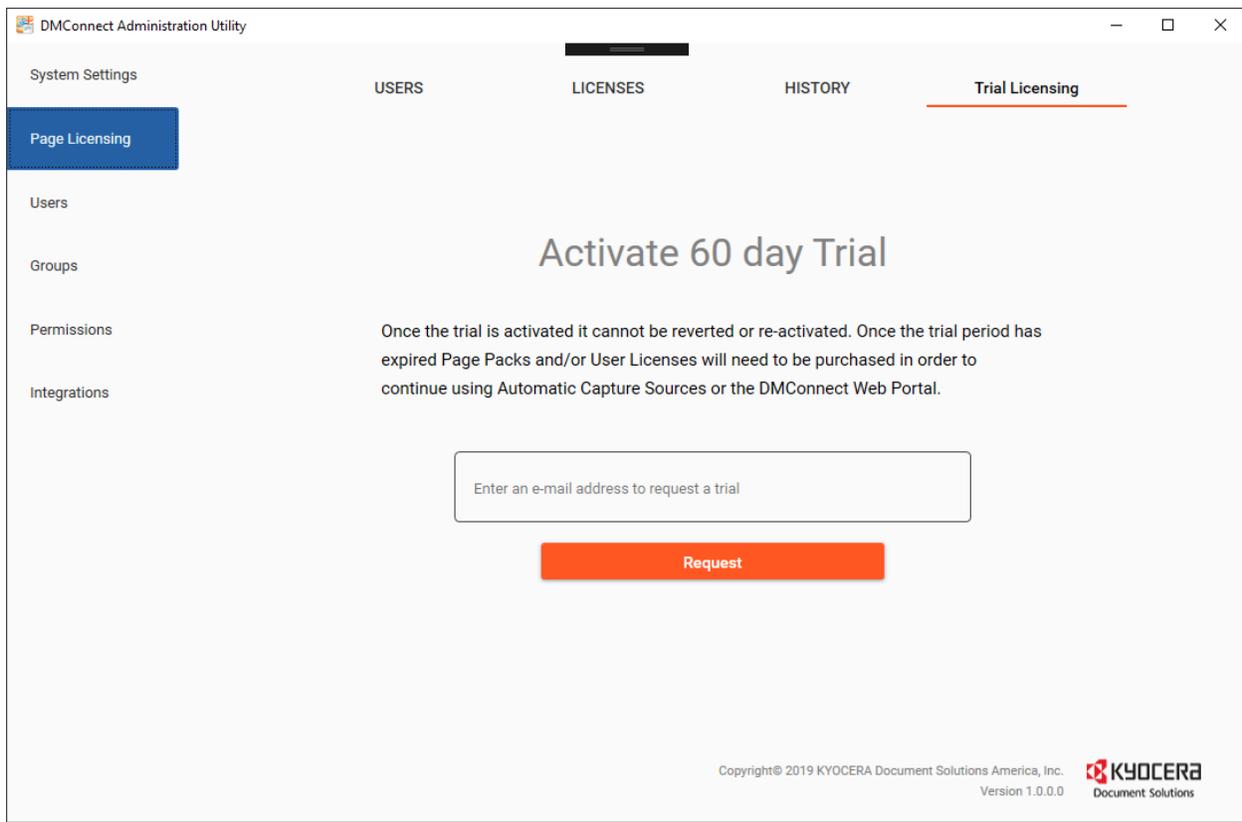
Date Range   Page Range

ConsumeDate	Consumed Pages	Workflow
7/01/2019 5:34 PM	1	HotFolder

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The History tab is used to look at the Page Pack history and which workflows used pages out of each Page Pack key. The results list can be filtered by Date Range, Page Range, and/or Workflow.

## 4.2.4 Trial Licensing



Customers can request a 60-day trial (2 x 30-day trials) for the DMConnect Server application. during which time all aspects and features of the DMConnect application will be available.

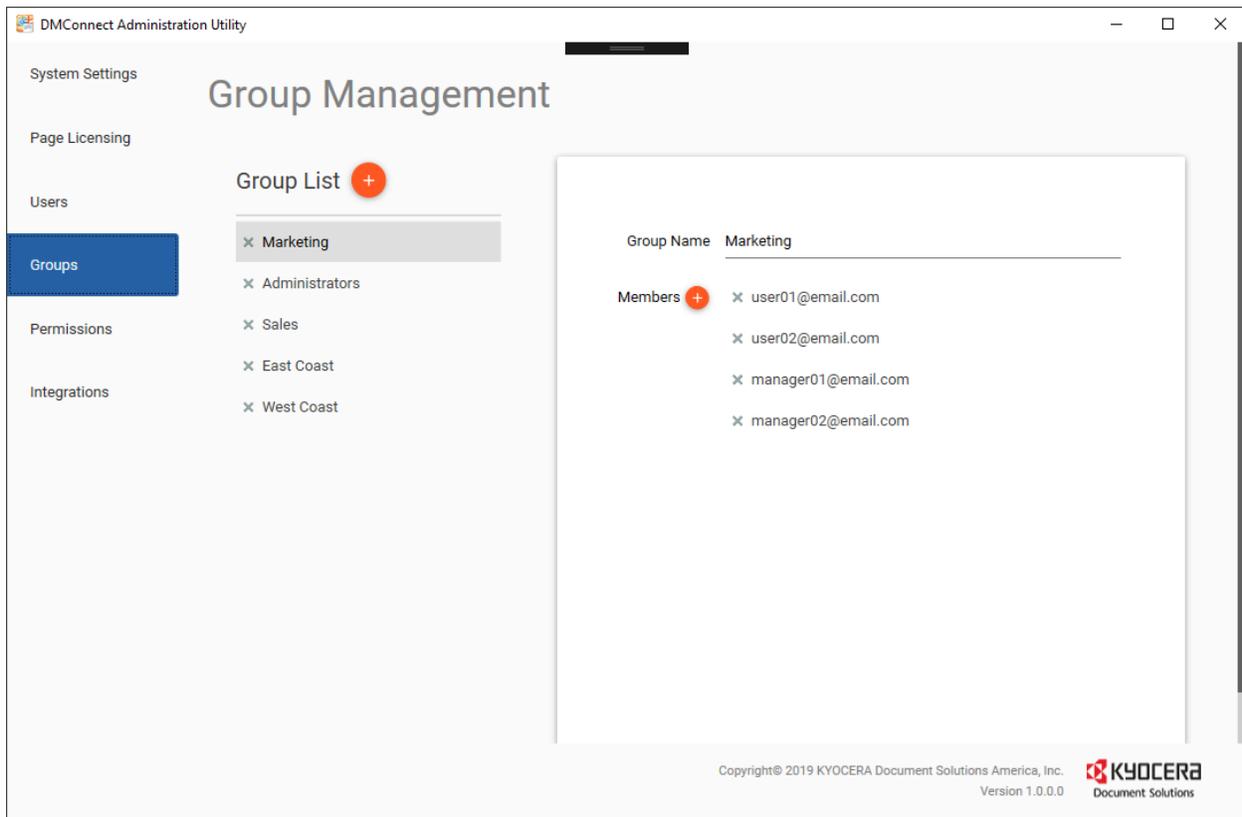
To request a trial, go to the DMConnect **Administration Utility > Page Licensing > Trial Licensing**, enter an email address, and press the Request button. And upon receiving the request and license code will be sent to the email address provided.

***NOTE: Only one trial per device is permitted.***

***NOTE: Once the trial is activated it cannot be reverted or re-activated. Once the trial period has expired Page Packs and/or User Licenses will need to be purchased in order to continue using Automatic Capture Sources or the DMConnect Web Portal.***

***NOTE: If an official Page Pack License or User License is installed during the trial period, the trial will automatically expire, and all Trial pages left will not be available.***

## 4.3 Groups

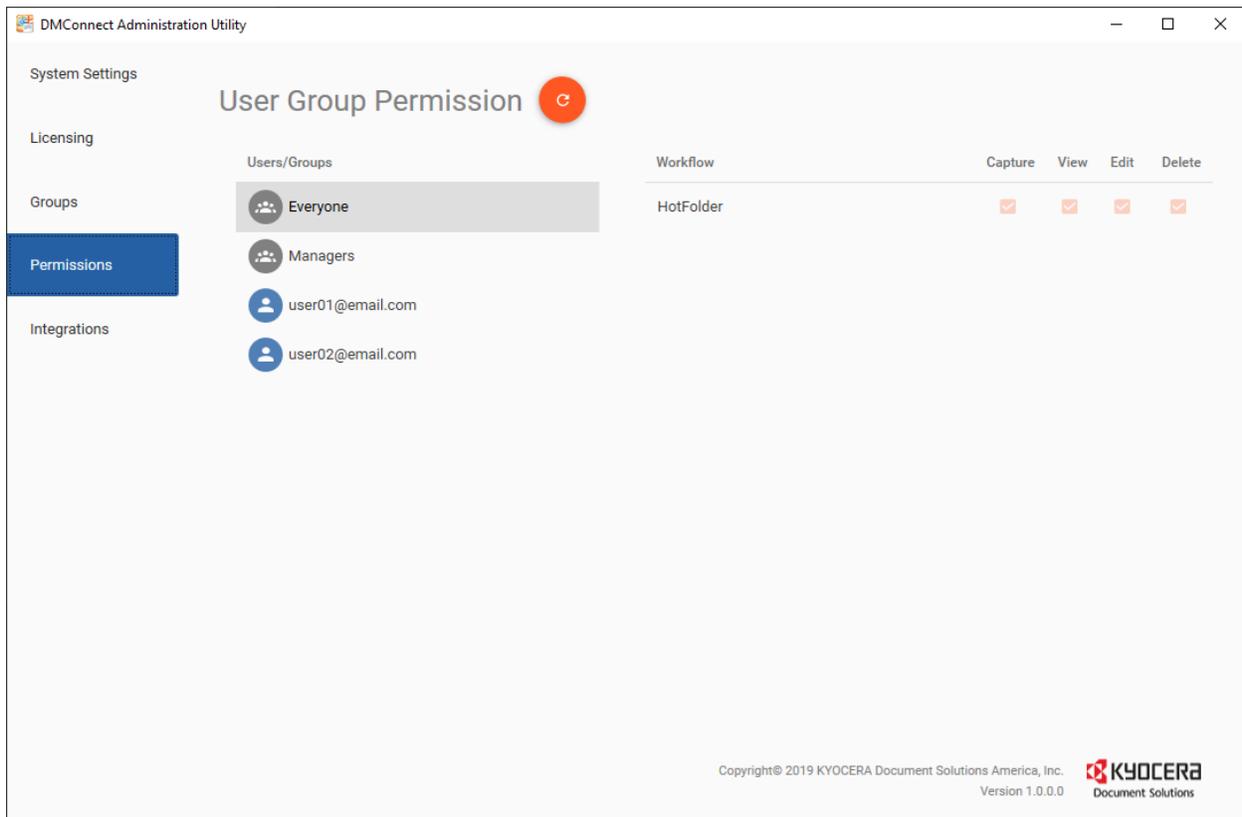


Groups can be created to assign permissions to multiple users at once. There is no limit to the number of groups that can be created or to how many users can be added to a group. Only users created in the Users tab can be added to a group.

### 4.3.1 Create a Group / Add Users to the Group

1. Click the Add Group button.
2. Change the default group name to something more meaningful.
3. Click the Add Members button.
4. Choose one or more users to add to the group.
5. Click the Add button.
6. Click the Save button.

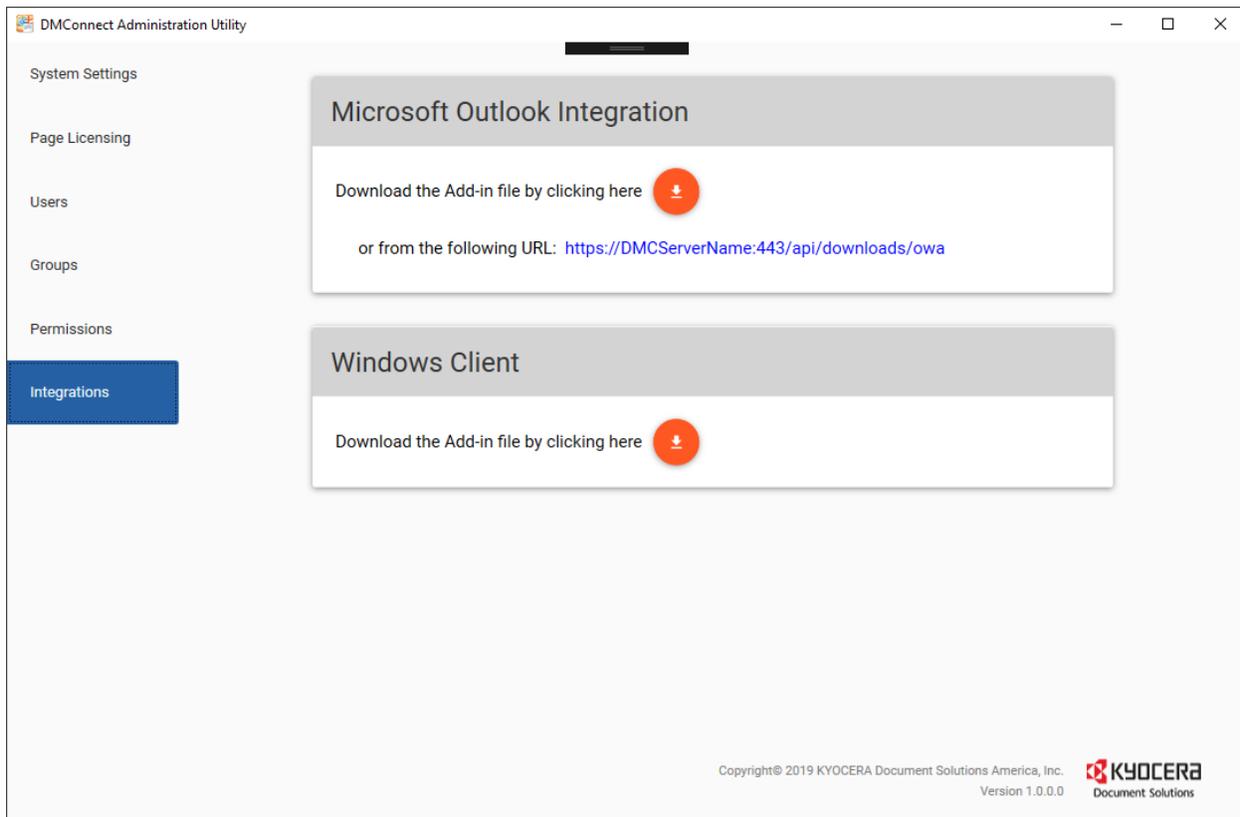
## 4.4 Permissions



Permissions can be assigned to Users and/or Groups to be able to capture from, view, edit, and delete jobs processed through the DMConnect Web Portal or the DMConnect Desktop Client. The User Group Permissions tab shows each user and group with their respective permissions to each workflow. Permissions cannot be added, deleted, or edited in this view. Those changes are made in the DMConnect Studio.

DMConnect permissions follow the Windows NTFS Permissions standard which means Deny permissions will always take precedence over Allow permissions. Basically, if a user has Allow permissions to a workflow but is also part of a group that has Deny permissions to the same workflow, the Deny permissions of the group will take precedence and the user will not be able to access the workflow.

## 4.5 Integrations



The Integrations tab is used to provide information about other DMConnect features. As of the writing of this document, the only two integrations available are the DMConnect Add-in for Microsoft Outlook and DMConnect Desktop Application.

### 4.5.1 DMConnect Outlook Integration

The DMConnect Outlook Add-in allows users to connect to and send email attachments directly in to a DMConnect workflow. Administrators can download the DMConnect Add-in .xml file for Microsoft Outlook from the Integrations tab. Installation instructions can be found in the following Microsoft articles:

- Individual Installation of an Outlook Add-in:  
<https://support.office.com/en-ie/article/get-an-office-add-in-for-outlook-1ee261f9-49bf-4ba6-b3e2-2ba7bcab64c8>
- Centralized Enterprise-wide Deployment of an Outlook Add-in:  
<https://docs.microsoft.com/en-us/office365/admin/manage/manage-deployment-of-add-ins?view=o365-worldwide>

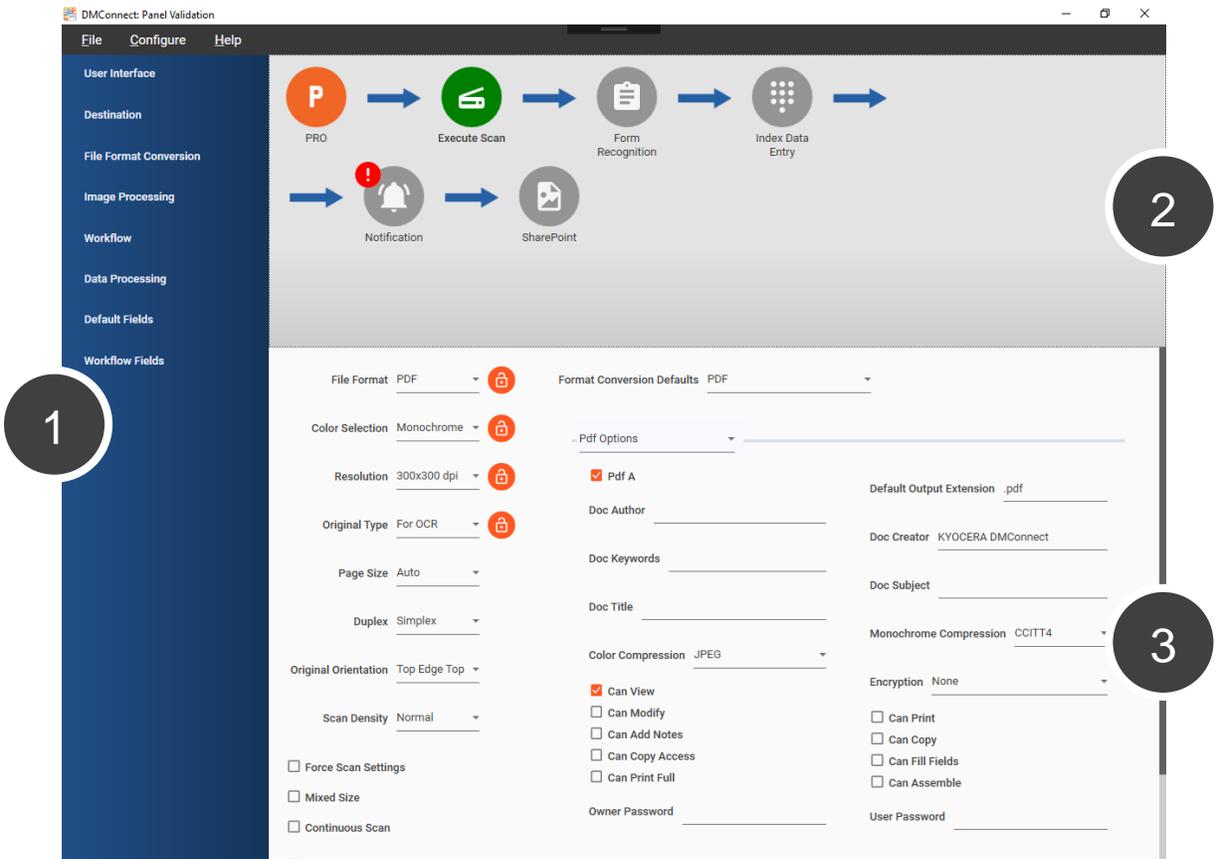
#### 4.5.2 DMConnect Desktop Client

***NOTE: As of the writing of this document, there is a known issue between the DMConnect Desktop Client and workflows that use the Folder Browser Component not showing the subfolders under to root folder. This issue will be resolved with the next release of DMConnect 3.0.***

The DMConnect Desktop Client allows users to upload documents and execute workflows directly from their workstation. The Desktop Client is very similar to the DMConnect Web Portal in operation but the DMConnect server's security certificates and settings are automatically bundle in to the .MSI package upon download. If changes are made to the DMConnect server, the .MSI package will need to be downloaded and installed again on a user's workstation. User's will also need a User License in order to use the DMConnect Desktop Client.

The .MSI package that is downloaded from the Integrations tab of the DMConnect Administrator's Utility can be distributed to user's workstation manually or via Group Policy. More information about deploying a .MSI package via Group Policy can be found in [this Microsoft Support article](#).

## 5. DMConnect Workflow Studio



DMConnect Studio is a server application used to create, configure, and maintain workflows that are used with the DMConnect HyPAS application as well as other capture sources. DMConnect Studio has been redesigned to provide a new visual workflow designer. The application screen can be broken down into Three sections:

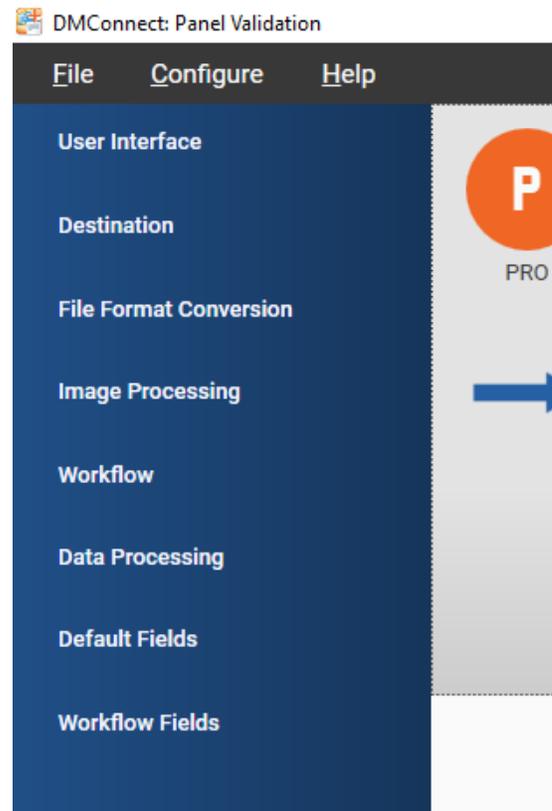
- 1. Component/Index Data List:** Lists all the components available to configure a workflow as well as Default Index Data fields and Workflow Index Data fields.
- 2. Workflow Canvas:** A visual representation of the workflow process
- 3. Component Configuration Pane:** Will show component-specific configuration options

## 5.1 Component List Pane

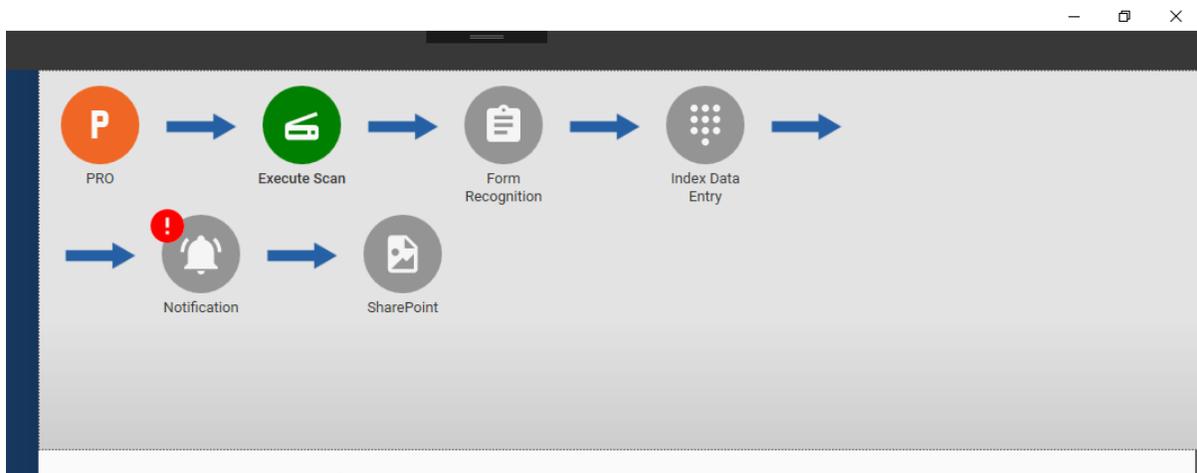
**NOTE: Some components are only available with specific versions of the DMConnect HyPAS application and Page Packs.**

The Components List Pane consists of dropdown boxes that contain components available to use in a workflow as well as two Data Field dropdown boxes. Components fall in to six (6) categories:

1. User Interface
2. Destination
3. File Format Conversion
4. Image Processing
5. Workflow
6. Data Processing

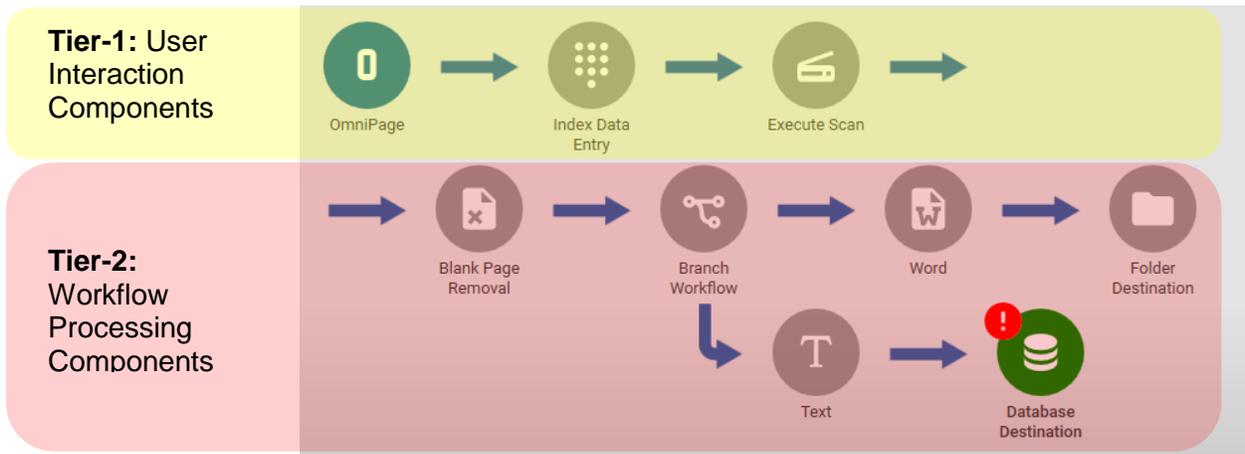


## 5.2 Workflow Canvas



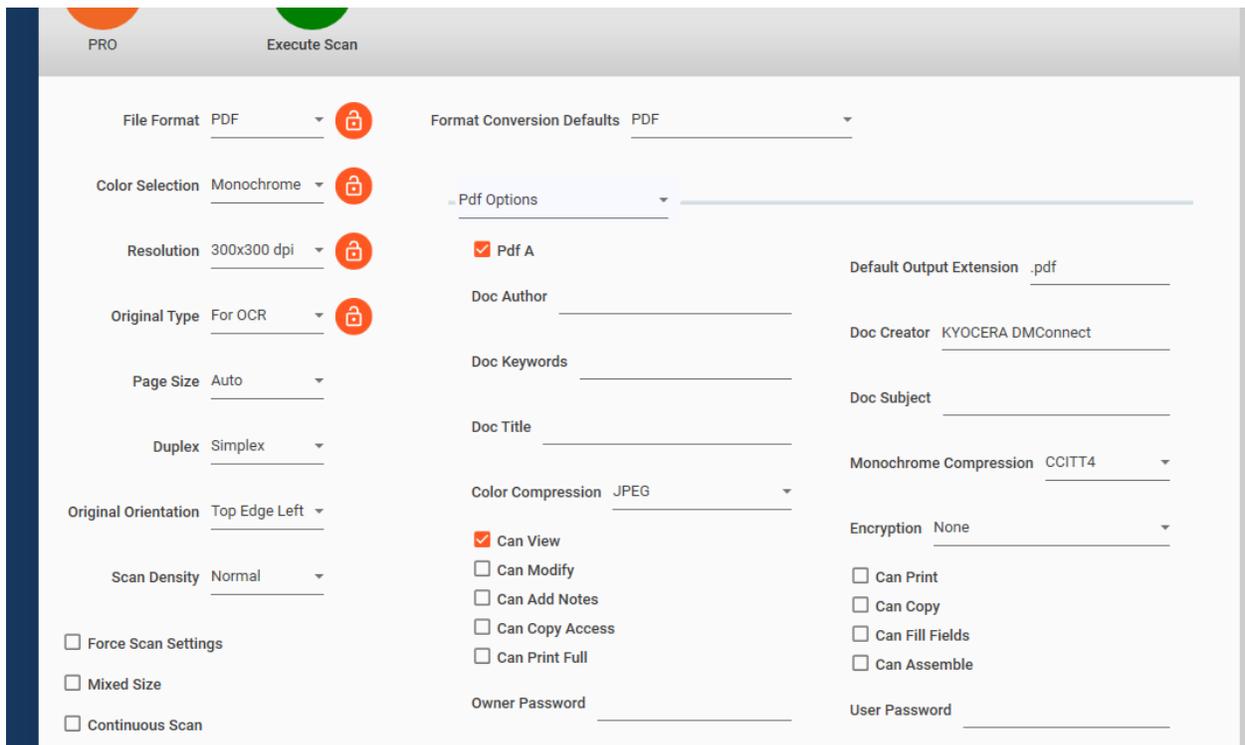


The Workflow Canvas is where the workflow's components, operations, and order of execution is defined. The Workflow Canvas is broken up into two tiers:



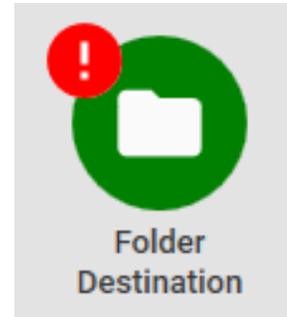
User-Interaction Components will display on the MFP panel when the workflow is executed. Workflow Processing Components are not displayed on the MFP panel and are executed after the “Scan Now” button is pressed on the MFP panel. Certain Tier-2 components may be placed in the Tier-1 section, but Tier-1 components CAN NOT be placed in the Tier-2 section.

### 5.3 Component Configuration Pane



The Component Configuration Pane is used to configure each individual component currently in the workflow. Simply click on the component you wish to configure in the Workflow Canvas to display the component specific settings.

Certain components require configuration to function properly. These components will have a red exclamation point (“ ! “) on the top-left corner of the node to indicate they need further configuration. Simply click on the component to display its configuration settings and enter values for the required fields also outlined with a red box. You can also hover the mouse over the component to see a tooltip of the issues.



### 5.3.1 Component Configuration Pane Automatic Scrolling

When using index data in a component’s configuration and the whole Configuration Pane is not visible, users can click and drag a piece of index data in to the configuration panel which will automatically scroll up or down if the dragged item is held at the top or bottom of the pane respectively.

## 6. DMConnect Document Management Web Portal

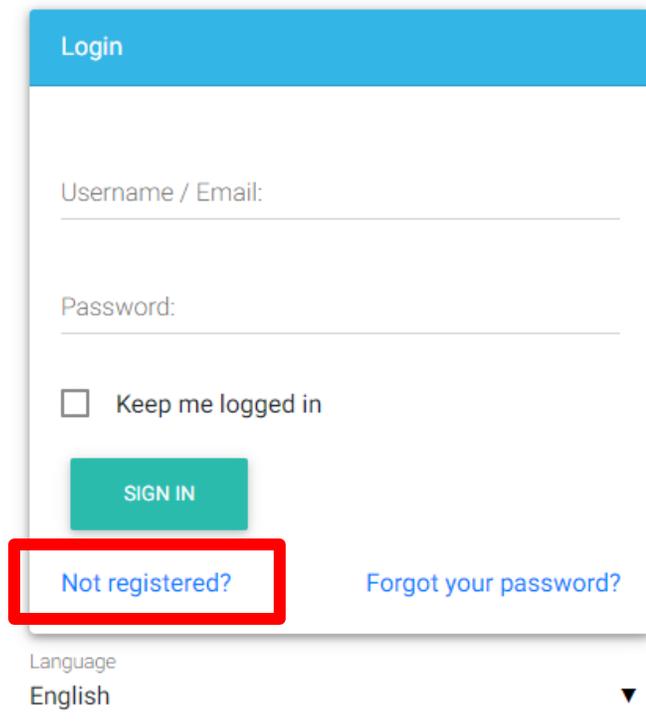
New to DMConnect 3.0 is the Document Management Web Portal. Here authorized users can view current and past scan jobs as well pending and failed jobs. The Web Portal will also display any error information in case a scan job did not complete correctly.

### 6.1 User Registration

Each individual user must have a valid User License to access the Web Portal. Licensing is done in the DMConnect Administrator Utility. Please refer to the [User Licenses](#) section of this document for more information.

Once a user or users are licensed, they can go to the DMConnect Web Portal URL which by default will be **https://<hostname>** where <hostname> is either the hostname of the DMConnect Server and any other name that was configured with the certificate creation.

Initially users will see the log in screen but will not have a password to log in with. First time users must register themselves by clicking the “Not registered?” link on the bottom left of the log in panel.



Language  
English ▼

Users need to enter the email address this is associated with their DMConnect User License the click the Submit button.

### New Account Registration

Create your account by specifying an email address

Email:  
WebPortalLicenseEmail@email.com

---

**SUBMIT**

Language  
English ▼

---

A registration email will be sent to the email address if that email address is licensed.

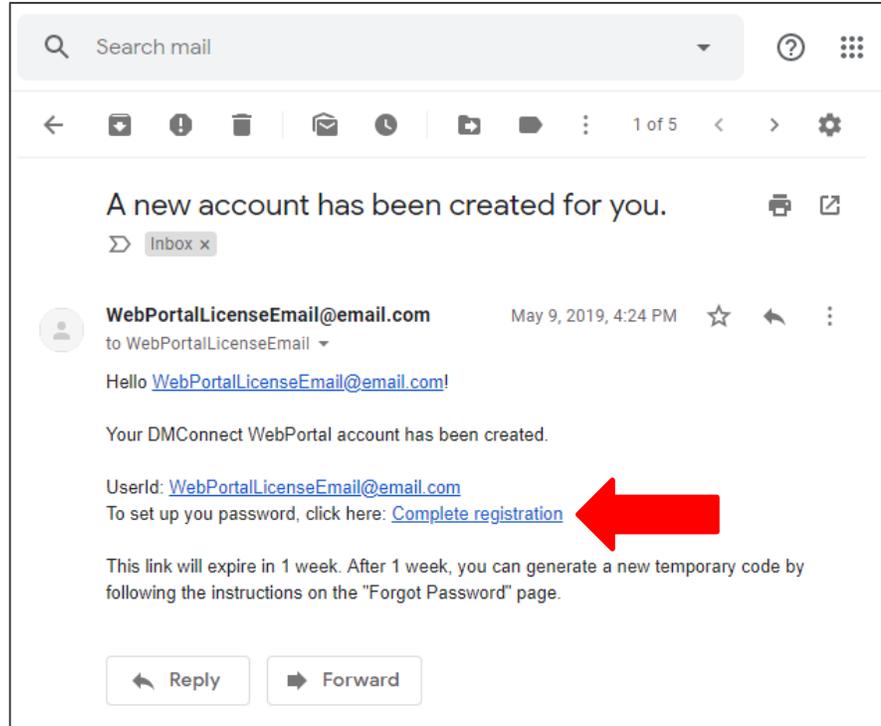
### New Account Registration

An email has been sent out. Please follow the directions to create your account.

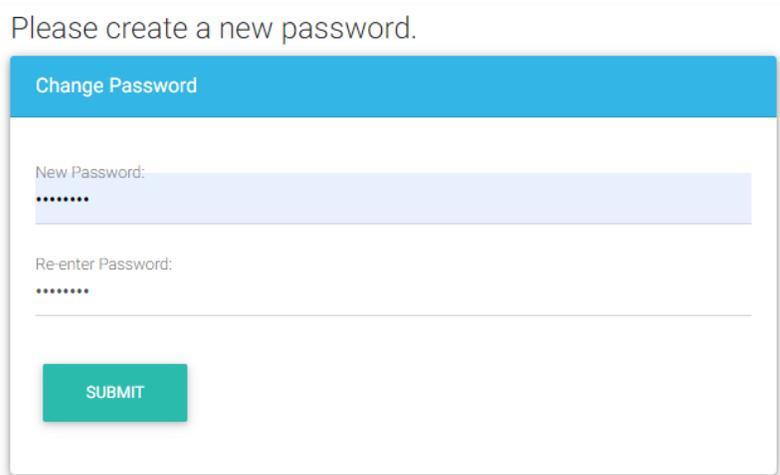
Language  
English ▼

---

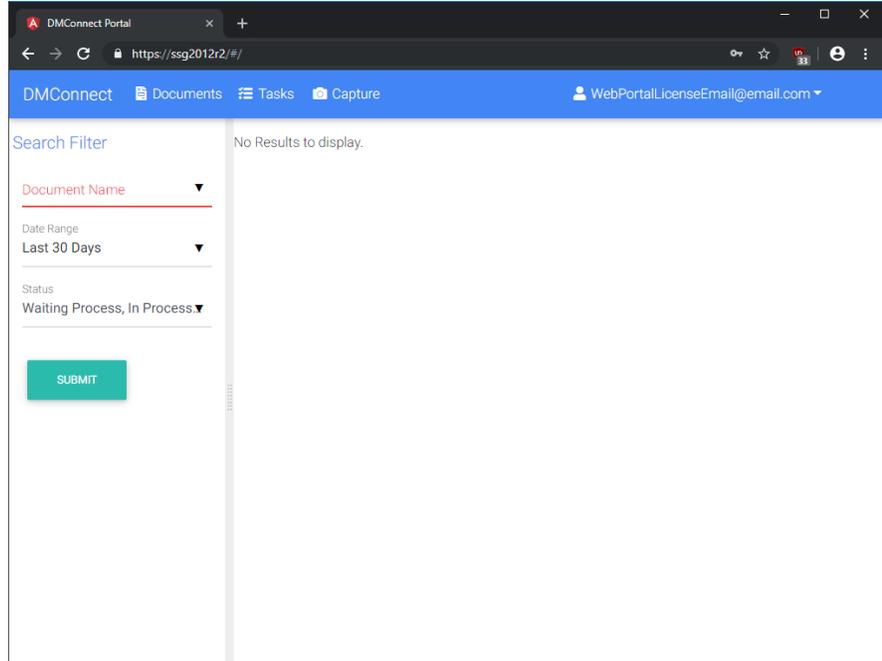
Inside the registration email will be a link to complete the registration process.



Clicking the link will take the user in to the DMConnect Web Portal and require them to create a new password for themselves then re-enter the password for verification.



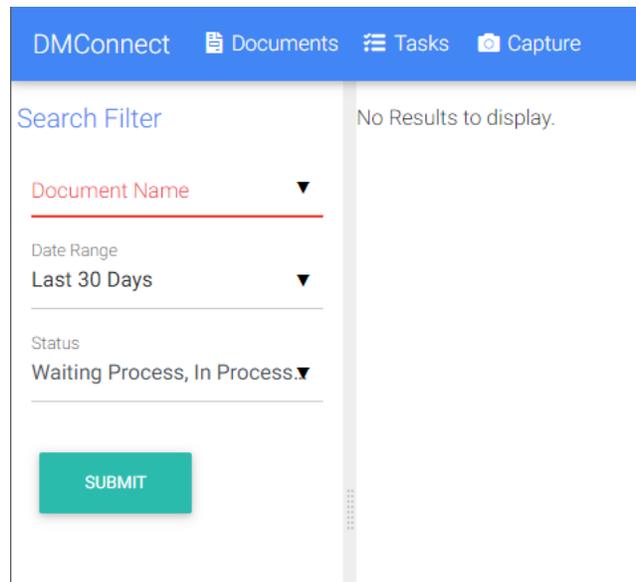
Once the password has been created users will be taken to the DMConnect Portal home page.



## 6.2 Documents Tab

The Documents Tab the default Home Page of the DMConnect Web Portal and is where users can search for past and pending jobs and see detailed information about the jobs. On the right-hand side of the page is a Search Filter which has three fields: Document Name, Date Range, and Status.

**Document Name** is a dropdown list of all the workflows that have been processed so far. If a workflow was created but never used it will not show in this list.



Selecting a workflow name in the list will change the search filter fields to include the indexing fields of the workflow to help narrow down search results. If an index field is a List field the corresponding search filter field will also display as a list.

DMConnect  Documents

Search Filter

Document Name  
Basic Workflow with Index... ▼

---

Date Range  
Last 30 Days ▼

---

Status  
Waiting Process, In Process... ▼

---

Document Name  
MarketingExpenses ✕

---

Document Type  
Invoice, Employee Insuranc... ▼

---

Transaction Date

From

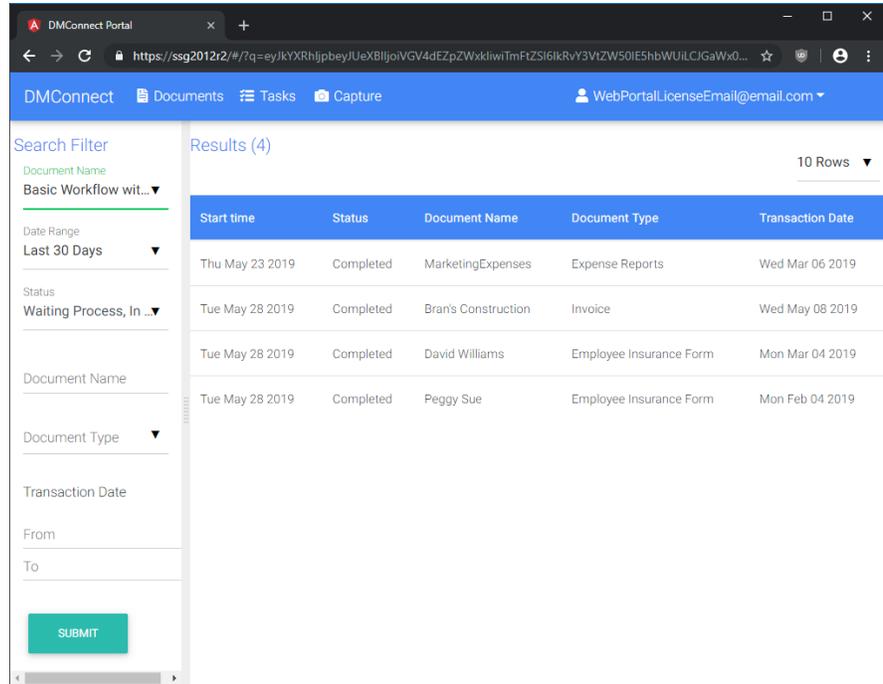
---

To

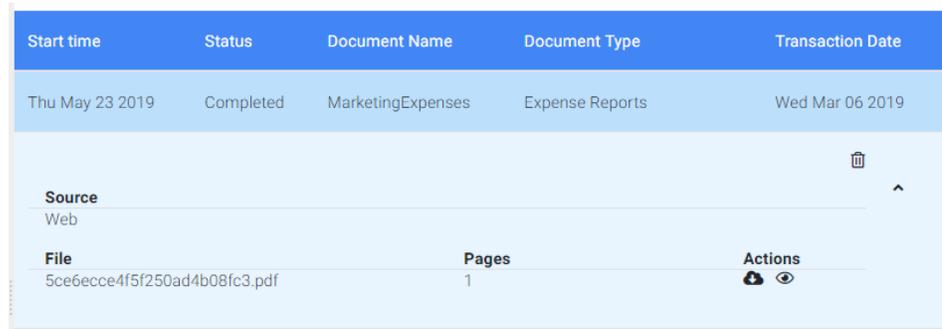
---

**SUBMIT**

Clicking the Submit button will show results in the Result pane to the right of the Search Filter list. The columns of the results will show Start Time and Status by default but the rest of the columns will be specific to the indexing fields of the workflow.



Each row can be selected and will expand to show more details and/or any error information. These details will also vary depending on the capture source.

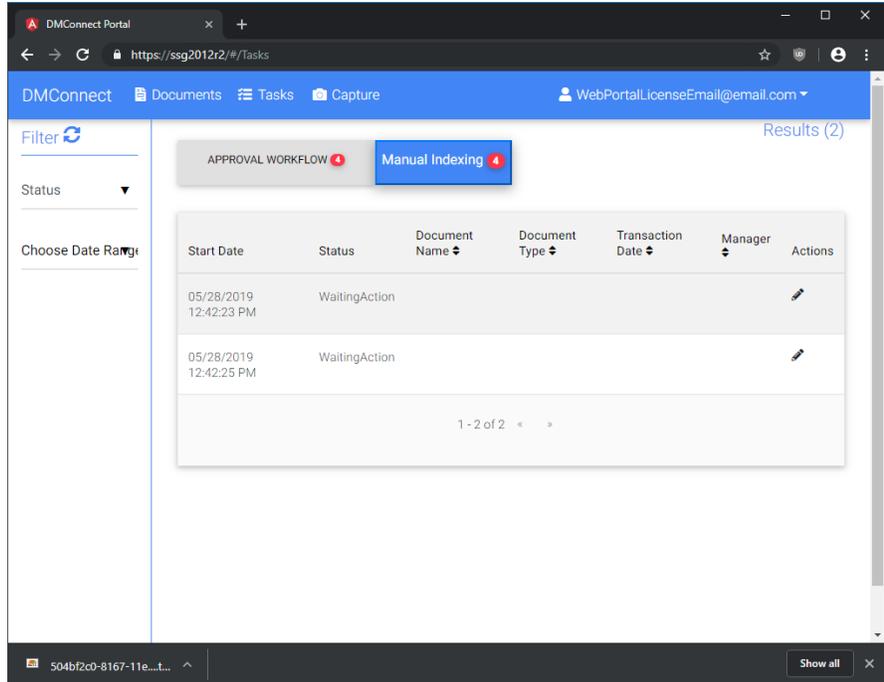


Users can choose to delete this record via the Garbage Can icon in the upper right-hand corner. The Actions section allows users to either download the document(s) or view the document(s) in DMConnect's built-in Document Viewer if it is a compatible file type.

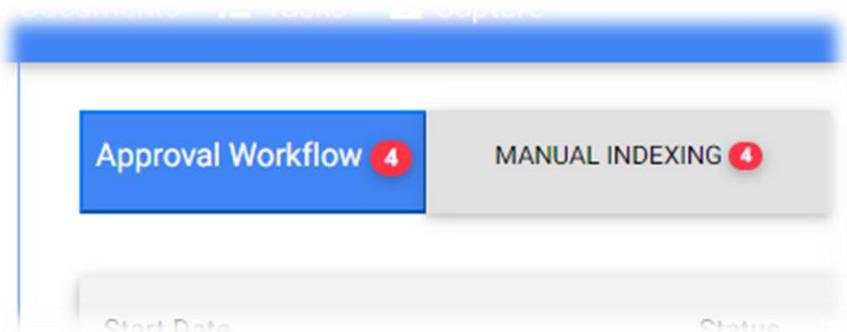
### 6.3 Tasks Tab



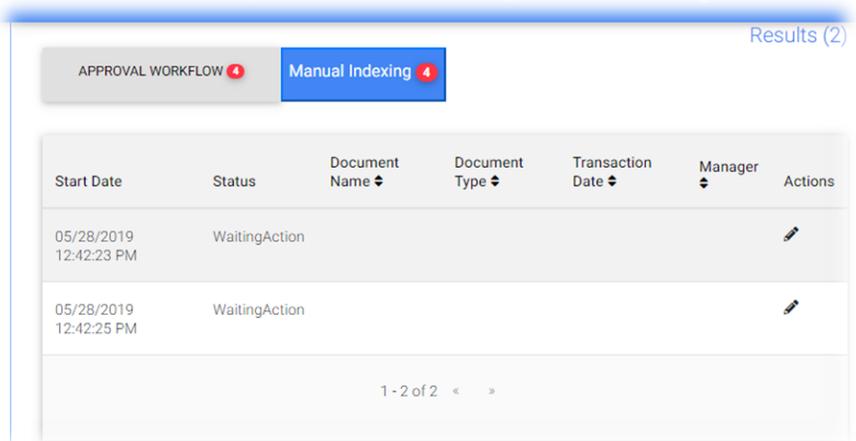
The Tasks Tab will show jobs that require the logged in user's attention. Examples would be if a user needs to enter index data information for a document captured via a Hot Folder or if a workflow was using the Queue for Approval Component.



Each workflow requesting a task will be displayed above the request list and indicate how many tasks are pending for the user.



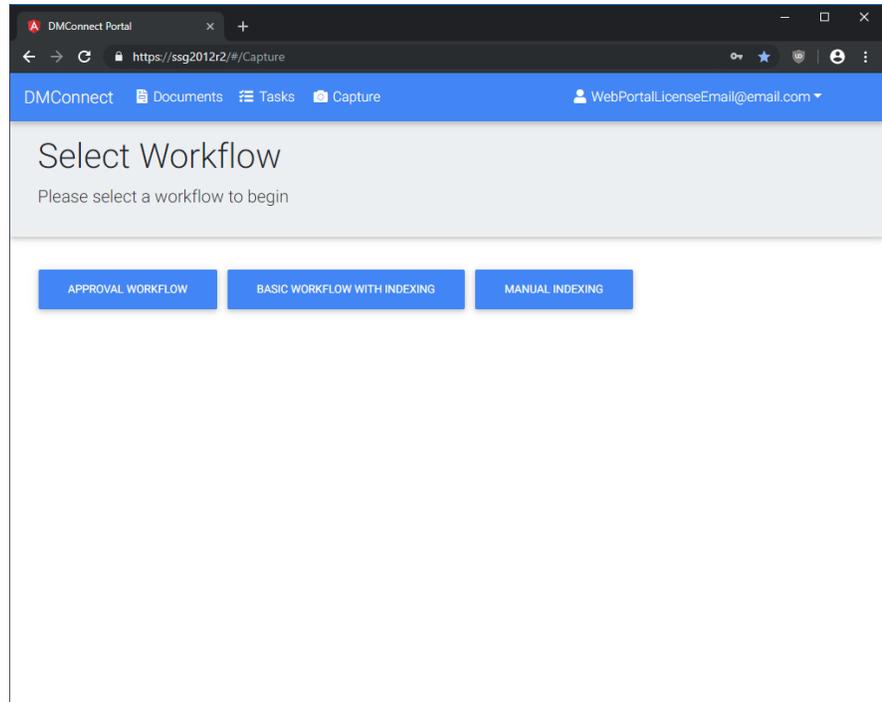
The task list displays each task that is assigned to the user as well as the Start Date of when the specific workflow was started, Status displaying the current status of the workflow, and an Action column which will navigate the user to the specific task to be



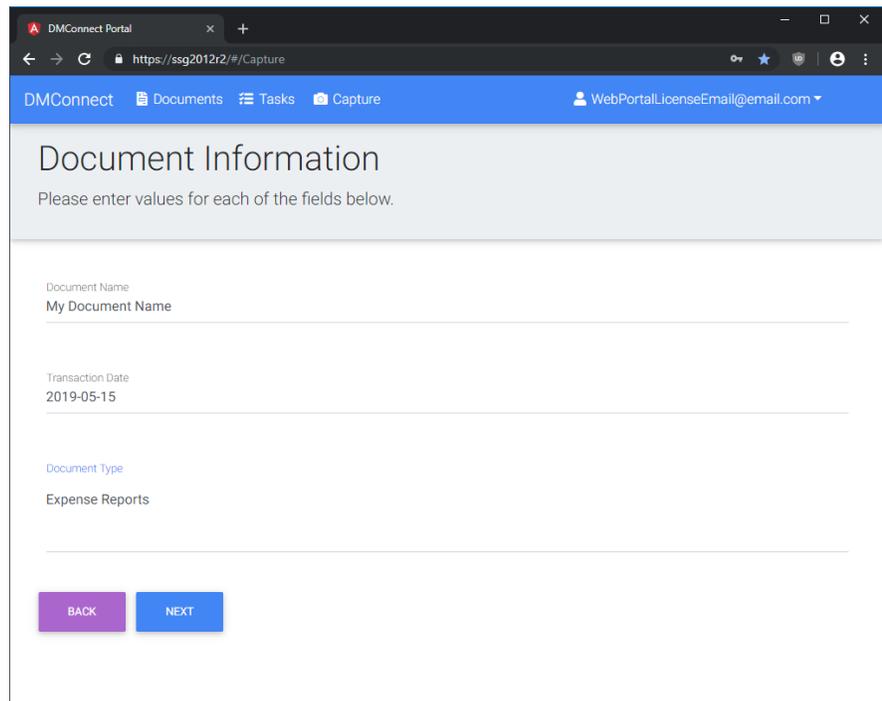
completed. Depending on the workflow, columns of Index Data values may also be displayed in the Task List.

## 6.4 Capture Tab

The Capture Tab allows users to upload documents into a DMConnect workflow. Each workflow configured in DMConnect will be displayed unless the logged in user does not have permissions to use that workflow. For more information on Workflow Permissions please refer the [Permissions](#) section of this document.



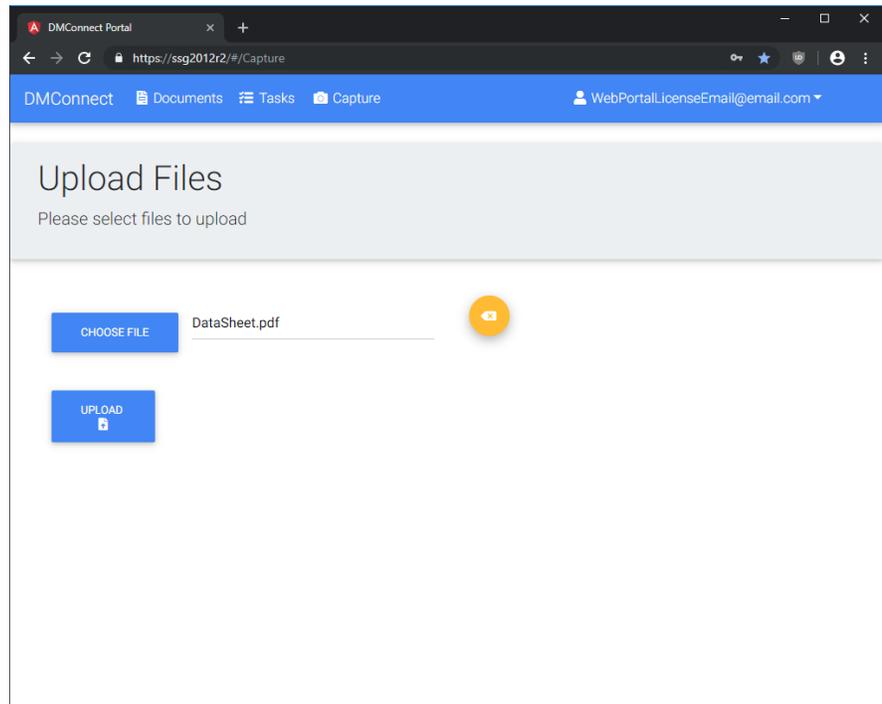
To begin a workflow, simply click the associated button that displays the workflow name. Index fields will display as they are configured in the workflow with all their respective configuration options. If a field is required to be populated it will also be required executing the workflow through the DMConnect Web Portal. If there are multiple Index Data Components used in



the workflow, each component will display the Index Data Fields on it's own page. Pages can be navigated using the **Back** and **Next** buttons.

Documents can be uploaded by clicking the **Choose File** button. A Windows Explorer dialog will display allowing the user to browse to the required document. **Only one document can be uploaded at a time.**

Once the document is selected it can be uploaded by clicking the **Upload** button. Once uploaded users will be returned to the Workflow Selection screen.



## 7. Component Descriptions

### 7.1 The Capture Component

The Capture Component is the first component in any and all workflows and is inserted into every workflow by default. It cannot be deleted, and it cannot be moved elsewhere in the workflow. It is also the only component that does not exist in any of the dropdown boxes in the Component List Pane.

The icon and label of the Capture Component will differ depending on how the workflow is configured. It is designed to signify what level of DMConnect is necessary to complete the workflow as to avoid creating or importing workflows that cannot be executed in the other versions of DMConnect. Adding components that require specific DMConnect versions will change the icon accordingly. For example, adding the Forms Recognition component will change the Capture component icon with an orange “P” and the label will say “PRO” to signify a DMConnect PRO license is required to complete the workflow.



Basic



OmniPage



PRO

The Capture component can be configured to allow multiple capture sources such as Hot Folder (Watched Folder), FTP, and Email. If one or more capture sources are configured the icon will again change to include three dots underneath the letter to signify multiple capture sources are configured as shown in the image to the right.



Inside the Capture component's configuration are three tabs: MFP, INTERACTIVE, and AUTOMATIC.

## 7.1.1 MFP

MFP INTERACTIVE AUTOMATIC

Restrict access to LDAP Groups  Restrict access from MFP

Permitted AD groups 

CN=DnsAdmins,CN=Users,DC=SSG,DC=local	192.168.0.12
CN=Enterprise Read-only Domain Controllers,CN=Users,DC=SSG,DC=	192.168.0.13
CN=Enterprise Key Admins,CN=Users,DC=SSG,DC=local	192.168.0.14
CN=Protected Users,CN=Users,DC=SSG,DC=local	

Enable Card Login  
 Enable Self Registration  
 Modify with Query Account

LDAP Attribute info ( Telephones tab > Notes )

**NOTE: The LDAP tab of the Administration Utility must be configured successfully to restrict workflow access by LDAP group and/or lookup and store HID card numbers.**

The MFP tab is used to configure workflow access and Card authentication. Workflow access can be restricted by LDAP group and/or MFP IP Address.

Card authentication can be configured to allow user to register their card ID with an LDAP attribute. The LDAP attribute to save the card ID to can be chosen by a dropdown list.

## 7.1.2 Interactive

MFP INTERACTIVE AUTOMATIC

Workflow Icon 

Repeat Workflow

The Interactive tab is used to assign an image to the workflow button that appears on the MFP panel and/or to enable Repeat Workflow which will return the user to the beginning of this

workflow once they've completed a scan as opposed to being returned to the workflow selection screen. The word "Interactive" in this context means "user interactive" as in seen on the MFP.

### 7.1.3 Automatic

The screenshot displays the configuration interface for the 'Automatic' tab. On the left, a sidebar lists three source components: 'HotFolderSourceComponent', 'POP3SourceComponent', and 'FtpSourceComponent'. The 'FtpSourceComponent' is selected. The main configuration area includes the following fields and options:

- FTP Protocol:** FTP
- Hostname:** myFTP.site.local
- Port:** 587
- SitePath:** /DMConnect/FTP\_DOCS
- Depth:** 0
- Anonymous:**
- User Name:** username
- Password:** [Masked]
- Queue documents for indexing:**
- Send Email Notifications:**
- Retry after:** 3 days
- Additional Source Filters:** .tif, .pdf

A message box at the bottom right contains the text: "Please check your DMConnect queue for incomplete documents that need your attention. Thank you!"

The Automatic tab used to configure additional capture sources other than the MFP. The term "Automatic" in this context means there is no user interaction. The Hot Folder, Email, and FTP capture sources are processed as those accounts are polled by the DMConnect engine and there is a new file or attachment available.

#### Hot Folder Source



A folder path can be configured which DMConnect will poll to see if there are new images to process. The types of files that will be processed can be filters in the **Additional Source Filters list**. Simply enter the file extension(s) which you would like DMConnect to pull in to the workflow. File types listed will be processed and file types not listed will be ignored.

### Email (POP3) Source



An Email account can be configured to be polled and when an email has an attachment DMConnect can process. When this account receives a new email with an appropriate attachment, DMConnect will automatically pull the attachment and process it. Attachment file types can be configured in the **Additional Source**

#### Filters list.

- **Server:** The email server that account lives in
- **User Name:** The username used to login to the email account
- **Password:** The associated password used to login to the email account
- **Port:** Port the email server uses for communication
- **SSL Enabled:** Check this box if the port requires SSL communication

### FTP / SFTP / FTPES Source



Just like the Email and Hot Folder sources, the FTP/SFTP/FTPES source is used to capture images from an FTP/SFTP/FTPES server. DMConnect will poll this source and when an appropriate file type is found it will be pulled in to the workflow and processed. Appropriate File types can be configured in the

#### Additional Source Filters list.

- **FPT Protocol:** Choose between FTP, SFTP, and FTPES
- **Hostname:** Hostname of the FTP server
- **Port:** Port the FTP server uses for communication
- **SitePath:** Specifies the directory/folder on the server that DMConnect should watch
- **Dept:** How far down from SitePath DMConnect should look for files
- **Anonymous:** Check this box if the server allows for an Anonymous connection
- **User Name:** *(Only available if the Anonymous checkbox is checked)* User Name to use for the Anonymous Connection
- **Password:** *(Only available if the Anonymous checkbox is checked)* Associative Password for the Anonymous Connection

### Additional Source Filters List

Automatic Capture sources can have filters applied to them by using the Additional Source Filters list. By default, this list is empty so DMConnect will process any compatible file type. By entering filters in to the Additional Source Filters list, you can effectively capture only the files you specify.

Wildcards can also be used to capture files that have similar names. For instance, a filter of “INVOICE\_\*.PDF” will capture both *INVOICE\_Smith.PDF* and *INVOICE\_06292019.PDF*.

Additional Source Filters

- × .PDF
- × INVOICE\_\*.PDF
- × MarketingMaterials
- × .TIF

### Queue Documents for Indexing

When a document is captured by an automatic source only the image file is processed. There is not a way to automatically include index data with the image. To resolve this issue, the checkbox **Queue documents for indexing** can be checked and users in the **Indexing Users Email Address(s)** list will have the scan jobs appear in their Web Portal Queue. From here, the users can manually enter index for the scan job.

Queue documents for indexing

Indexing Users Email Address(s)

- user01@email.com
- user02@email.com
- user03@email.com

**NOTE: Users must have a valid User License to be able to access the Web Portal.**

Additionally, an email can be sent to each user in the Indexing Users Email Address(s) list to notify them there is a new scan job that needs their attention by checking the **Send Email Notifications** checkbox.

Send Email Notifications

Retry after 3 days

Message

Please check your DMConnect queue for incomplete documents that need your attention. Thank you!

A retry period can be configured in case the first email is not responded to and an Email



Message can be configured that will display in the notification email along with a link to the scan job.

**NOTE: SMTP settings in the Administrators Utility must be configured to successfully send an email message.**

## 7.2 User Interface Components

These components are used on the first tier of the Workflow Canvas and typically require user interaction.

### 7.2.1 AD (Active Directory) Authentication Component



The AD (Active Directory) Authentication Component is used to obtain a user's Active Directory property information in the workflow or simply force a login before proceeding in a workflow. **This component does not function as a log-on session.** This means when a user logs in to the workflow/component with their username and password, their password is not stored and cannot be used throughout the rest of the workflow. This component also cannot be used as an authentication piece for any other component that requires user authentication. This component simply gathers Active Directory property information about the user that can be used throughout the workflow.

To use, simply click the **Add New Property Reference** button and select the property you wish to use from the dropdown list. To remove a property, simply select the property you wish to remove and click the trash can icon.

After selecting the properties, you will be able to drag and drop that information into any textbox that accepts drag and drop. Notice on the right most column, "AD\_" drag field corresponds with the properties configured in AD Authentication component.

### 7.2.2 Index Data Entry Component



DMConnect Studio allows for creating custom Input Fields to receive information from the user and apply that information throughout the workflow. On the MFP panel, each instance of the Index Data Entry Component will display on its own screen.

The Index Data list is initially empty by default, but new entries can be added by hovering over the Add Index Data button then clicking on one of the four(4) index data field types: **Text**, **Numeric**, **Date**, **List**. Index data fields will display as they are ordered in the list. Individual index data fields can be moved up or down in the list by clicking the up and down arrows in its container. Additionally, individual index data fields can be removed by clicking the remove button on the far-right end of its container.

### Text Field

- **ID (required):** Name of the index data field. This name will be used as the ID for the index data field created to use in DMConnect Workflow Studio and the ID of the field displayed to users when they use the workflow.
- **Description:** A brief informational description of what the index data field is supposed to capture. On the MFP panel a button with a question mark will be created next to the index data field that can be selected to display a popup box that will display the description.
- **Required:** Check to require users to enter something in to the field before they can move forward in the workflow. A red asterisk will be displayed next to the index field ID to indicate it is required.
- **Default Value:** This value will be entered in to the index field by default, but it can be changed by the user.
- **Password (masked):** Check to mask the text entered in to the field.

- **Read-only:** Check to prevent users from changing the value of the field. The input box will no longer be editable.
- **Character Limit:** Minimum and Maximum amount of characters that can be entered in to the field.

### Numeric Field

- **ID (required):** Name of the index data field. This name will be used as the ID for the index data field created to use in DMConnect Workflow Studio and the ID of the field displayed to users when they use the workflow.
- **Description:** A brief informational description of what the index data field is supposed to capture. On the MFP panel a button with a question mark will be created next to the index data field that can be selected to display a popup box that will display the description.
- **Required:** Check to require users to enter something in to the field before they can move forward in the workflow. A red asterisk will be displayed next to the index field ID to indicate it is required.
- **Default Value:** This value will be entered in to the index field by default, but it can be changed by the user.
- **Min:** The minimum digit that can be entered. For example, if this is set to 5 users cannot enter 0 to 4.
- **Max:** The maximum digit that can be entered. For example, if this is set to 100, users can only enter digits from 0 to 100.

## Date Field

- **ID (required):** Name of the index data field. This name will be used as the ID for the index data field created to use in DMConnect Workflow Studio and the ID of the field displayed to users when they use the workflow.
- **Description:** A brief informational description of what the index data field is supposed to capture. On the MFP panel a button with a question mark will be created next to the index data field that can be selected to display a popup box that will display the description.
- **Required:** Check to require users to enter something in to the field before they can move forward in the workflow. A red asterisk will be displayed next to the index field ID to indicate it is required.
- **Default Value:** This value will be entered in to the index field by default, but it can be changed by the user.
- **Format:** Choose the display format of the date from the dropdown menu

<b>Month First, Hyphen Separated, Short Format</b>	06-15-2019
<b>System Locale, Short Format</b> <i>Format will be determined by the locale configured on the DMConnect server.</i>	<b>en-US:</b> 6/15/2019 <b>fr-FR:</b> 15/06/2019

<b>System Locale, Long Format</b> <i>Format will be determined by the locale configured on the DMConnect server.</i>	<b>en-US:</b> <i>Monday, June 15, 2019</i> <b>De-DE:</b> <i>Montag, 15. Juni 2019</i>
<b>Date First, Hyphen Separated, Short Format</b>	<i>15-06-2019</i>
<b>Sortable Date, Hyphen Separated</b>	<i>2014-06-15</i>
<b>Month First, Slash Separated, Short Format</b>	<i>06/15/2019</i>
<b>Date First, Slash Separated, Short Format</b>	<i>15/06/2019</i>
<b>Sortable Date, Slash Separated</b>	<i>2019/06/15</i>

***NOTE: Any of the Date Format Options that use a slash (“ / “) will cause an Invalid Character in File Path error if used as the document name or destination folder name.***

- **Min:** The earliest date users would be allowed to enter.
- **Max:** The latest date users would be allowed to enter.

## List Field

The screenshot displays the configuration interface for a 'List Field'. On the left sidebar, 'My List Field' is selected. The main configuration area includes the following fields and options:

- ID:** My List Field
- Description:** An Example of the List Field
- Required:**
- Multiple selection**
- Allow user to enter new items**
- Allow Searching**
- Fixed List**
- Database Lookup**

List Item 01
List Item 02
List Item 03
List Item 04
List Item 05

- **ID (required):** Name of the index data field. This name will be used as the ID for the index data field created to use in DMConnect Workflow Studio and the ID of the field displayed to users when they use the workflow.
- **Description:** A brief informational description of what the index data field is supposed to capture. On the MFP panel a button with a question mark will be created next to the index data field that can be selected to display a popup box that will display the description.
- **Required:** Check to require users to enter something in to the field before they can move forward in the workflow. A red asterisk will be displayed next to the index field ID to indicate it is required.
- **Multiple Selection:** Check to allow users to selected multiple items in one list. Uncheck to only allow a single item to be selected.
- **Allow users to enter new items:** Check to allow users to manually input items not in the list.

***NOTE: Items manually entered WILL NOT be permanently added to the list and will only be available in the current session.***

- **Allow Searching:** Check to allow users to search the list for items. This is especially useful with large lists.
- **Fixed List:** This list is configured in the workflow itself. Items are manually entered in to the list field one-by-one.
- **Database Lookup:** The list field can be connected to a database or an Excel spreadsheet to perform lookups. These are useful if they are already in place or if administrators would like the ability to monitor and adjust these lists without having to adjust the workflow. For more information on how to use the Database Lookup aspect of the List field see the [Data Lookup Component](#) section of this document.

### 7.2.3 Folder Browse Component

***NOTE: As of the writing of this document, there is a known issue between the DMConnect Desktop Client and workflows that use the Folder Browser Component not showing the subfolders under to root folder. This issue will be resolved with the next release of DMConnect 3.0.***

The Folder Browse Component is used to allow a user at the MFP to traverse a folder structure and select a scan destination. If authentication is necessary to access the folder, a Folder Access Account can be configured.

- **Id:** Specify a name for the component which will be displayed on the MFP. This field can be any combination of text and the drag and drop variables.
- **Root Directory:** Specify the beginning directory path.
- **Maximum folder depth:** Specify the maximum amount and user can go into the folder structure. If left blank there will be no limit.
- **Require user to select folder at depth set above:** Check to force the user to scan to the maximum folder depth. They will not be able to scan to any folders in-between the Root Directory and Maximum Folder Depth.
- **This folder requires authentication:** Check if user credentials are required to access this folder. Please refer to the [Folder Access Settings Section](#) for more information regarding Folder Access accounts.

Once the Folder Browse Component has been configured, the ID will display in the Workflow Fields list as a piece of index data and can be used throughout the workflow.

***NOTE: The test connection button will only work if a valid folder path is provided. It will not work with a drag-and-drop fields as its value.***

## 7.2.4 Execute Scan Component



The Execute Scan Component is used to configure the default scan settings to be used during scanning and image processing. The left side of the pane is for configuring the basic scan settings. Certain settings can be “locked” to not allow the user to change them on the MFP and allow for scan uniformity. The right side of the pane is used for format specific settings. For more information on the format specific settings, please refer to the File Format Conversion component specific to the format.

### Default Scan Settings

- **File Format:** TIFF, PDF, Searchable PDF, Word, XPS, Excel, Text, PowerPoint (*lockable*)
- **Color Selection:** Monochrome, Grayscale, Full Color, Auto (Color/BW), Auto (Color/Grayscale (*lockable*))
- **Resolution:** 200x200-, 300x300-, 400x400-, 600x600-dpi (*lockable*)
- **Original Type:** Photo, Text, Photo/Text, for OCR (*lockable*)
- **Page Size:** Paper size. Use Auto for automatic paper size detection.
- **Duplex:** One-sided (OFF), Duplex (ON)
- **Original Orientation:** Top Edge Top, Top Edge Left
- **Scan Density:** Darkest -3, -2, -1, Normal, 1, 2, 3 Lightest
- **Force Scan Settings:** Check to display scan settings on the MFP panel every time the user is about to start a scan.
- **Mixed Size:** Check to allow for scanning documents with mixed sizes of paper.

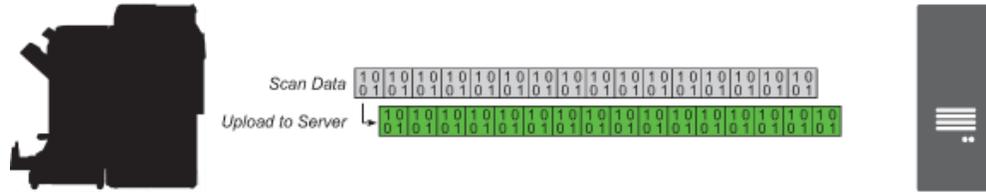
**NOTE: When Mixed Size is check, users will be unable to scan from the glass of the MFP.**

- **Continuous Scan:** Check to allow for continuous scanning at the MFP
- **Show Image Thumbnails:** Check to enable showing thumbnails of the scanned pages on the MFP panels
  - **Pause to show thumbnails:** Check this to force the users to view and inspect the thumbnails and press a “Finish” button to complete the workflow.
  - **Spool to disk:**
    - a. Checked (slowest):** Thumbnails are produced as the scan data is captured. The scan data is then transmitted to the server after the thumbnail is produced.
    - b. Unchecked (fastest):** Data transmission to the server will occur as the scan data is captured. Thumbnail production will not slow the speed of transmission.

**NOTE: Thumbnails are only available on large panel MFPs scanning in Monochrome at 200 or 300 dpi.**



## Normal Operation



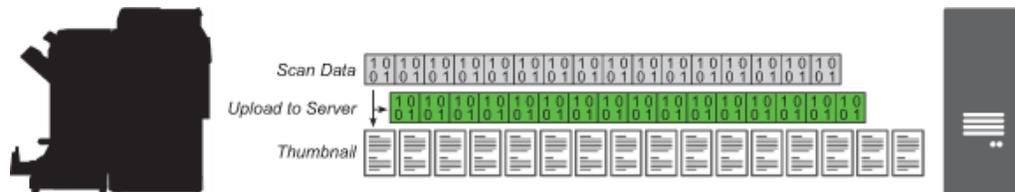
DMConnect will begin sending the scanned data to the server as it is received.

## Spool to disk UNCHECKED



Thumbnails are spooled to disk as the scan data comes in. The thumbnails are created and displayed then the data will be uploaded to the server. This process takes more time as the data will not be uploaded until after the thumbnail image is spooled and generated.

## Spool to Disk CHECKED



Thumbnails spool to disk alongside the upload of the data to the server. However, unless Pause to Show Thumbnails is also checked, the workflow will complete before all thumbnails are able to be shown on the MFP panel.

### Locking Scan Settings

The File Format, Color Selection, Resolution, and Original Type Scan Settings can be locked to prevent users from changing these settings at the MFP panel and ensure scan uniformity. To lock a setting, simply click the lock icon next to the setting dropdown list. An open lock (🔓) icon indicates the setting is unlocked and can be changed at the MFP. A closed lock (🔒) icon indicates the settings is locked and will be grayed out and unavailable on the MFP panel.

## 7.3 Destination Components

### 7.3.1 Print Document Component



The Print Document component is used to produce a printout of the document at some point in the workflow. The desired printer will need to be installed on the DMConnect server as DMConnect does not have the functionality to reach out to the network and query all printers and devices.

- **Printer Name** (*required*): The name of a printer that's installed on the DMConnect server that should print out the document.
- **Number of Copies**: Specify the number of copies to print.
- **Document Name**: The desired name of the document.
- **Duplex**: Check to enable duplex printing.
- **Start Page**: Page number to begin the print job. Leave blank to start at the first page.
- **End Page**: Page number to stop the print job. Leave blank to end at the last page.
- **Multiple pages per sheet**: Choose to print a One-, Two-, or Four-page composite on one sheet.
- **Monochrome**: Check to only print in Monochrome.
- **Account Code**: Account code.
- **Password**: Password if necessary.

**Detect paper size from image**: The proper paper size will be determined by measuring the scanned image in either Inches or Metric units.

### 7.3.2 Folder Destination Component



The Folder Destination is the most basic type of Destination Components. It will simply store the finished document(s) in a specified location. This folder location can be either local to the machine hosting DMConnect or a network folder.

- **File Name**: Specify the name you would the document to have. This field can be any combination of text and the drag and drop variables.
- **Folder Path**: Specify the path which you would like the document to be stored. This field can also contain drag and drop fields but does not ensure that the value of those fields is valid.
- **This folder requires authentication** (*checkbox*): Check if user credentials are required to access this folder. Please refer to [Folder Access Settings](#) section for more information.
- **Test** (*button*): Use this button to test the credentials against the folder path.

**NOTE: The test connection button will only work if a valid folder path is provided. It will not work with a drag-and-drop fields as its value.**

### 7.3.3 Flat File Destination Component



The Flat File Destination creates a text file of any given extension to be created alongside the document. This file can be anywhere from a basic text file to XML. The contents of the flat file are completely customizable and can include any metadata that needs to be included with the document.

Fields entered at the panel or generated from scripts can be dragged and dropped onto this window.

- a) File Name: Specify the name you would the document to have. This field can be any combination of text and the drag and drop variables.
- b) Folder Path: Specify the path which you would like the document and the flat file to be stored. This field can also contain drag and drop fields but does not ensure that the value of those fields is valid.
- c) Check the box label “This folder requires authentication” if user credentials are required to access this folder. Select the Folder Access settings to use from the list on the right-hand side. Please refer to [Folder Access Settings](#) section for more information.
- d) Data File Name: Specify the naming pattern for the index data file and the contents of the index data file in the spaces provided
- e) Same as Image: Check this if the flat file should be the same as image
- f) File extension: Specify the file extension of flat file if the flat file image name is the same as the document.
- g) Index Data File Contents: Contents of output file composed by combining plain text and drag-drop index data.

### 7.3.4 Database Destination Component



The Database Destination sends the finished document to a local or network folder location and inserts index data into an ODBC database.

- a) File Name: Specify the name you would the document to have. This field can be any combination of text and the drag and drop variables.
- b) Folder Path: Specify the path which you would like the document and the flat file to be stored. This field can also contain drag and drop fields but does not ensure that the value of those fields is valid.
- c) Check the box label “This folder requires authentication” if user credentials are required to access this folder. Please refer to [Folder Access Settings](#) section for more information.
- d) Data Source: Select the ODBC database from the drop down

- e) User Name & Password: Enter the database credentials and click “Open”
- f) Database Table: Select the table which you would like to insert data into
- g) Use Delimiter: Select the delimiter that your database requires for queries.
- h) Once the table is selected, the table columns will populate in the grid at the bottom of the screen. Here you can assign values to each column

### 7.3.5 FTP Destination Component

The FTP Destination allows a document to be uploaded to a server using the File Transfer Protocol(FTP). DMConnect supports three different types of FTP servers: FTP, FTPES, and SFTP. The default Site is the home directory, or ‘/’.

Optionally, the FTP Destination component allows uploading an index data file that can be composed by dragging and dropping index data fields.

#### *FTP*

FTP is a protocol that sends files unencrypted over the network.

#### *FTPES*

FTPES uses explicit TLS/SSL and requires the server running DMConnect to have a certificate stored in the Trusted Root. This can be done by testing the connection to the FTPES server in the DMConnect Studio. Upon successfully reaching the server, a window will pop up requesting permission to store the certificate. You can click on the “Details” button to view more information about the certificate.

#### *SFTP*

SFTP stand for SSH File Transfer Protocol. It is a protocol that sends files encrypted over the network by using the Secure Shell Protocol. This requires that a public key be cached in registry. To do this, simply hit “Test Connection” and upon success you will be prompted with a window asking you to accept the public key.

***NOTE: To upload a document to an FTPES or SFTP server, you must first test the connection from DMConnect Studio to install the certificate or public key.***

### 7.3.6 SharePoint Destination Component

The SharePoint Destination uploads the finished document to a SharePoint server. DMConnect supports uploading to both locally hosted SharePoint servers and to SharePoint Online. Once connected to a SharePoint site and the site and document library is selected, the index data configured to the Document Library will be displayed in the pane to the right and you can automatically create Index Fields based on the Document Library’s index data fields.

- **SharePoint URL:** The full URL of the SharePoint Site
- **Use SSL (HTTPS):** Check if the SharePoint server requires an SSL connection. This option will be automatically checked if “https://” is used in the SharePoint URL.
- **SharePoint Online / Office 365:** Check if using a SharePoint Online site. This option will be automatically checked if the SharePoint URL resembles the default SharePoint Online URL.
- **Username:** Username used to log in to SharePoint
- **Password:** Password associated with the username to log in to SharePoint
- **Domain:** The domain of the SharePoint Site
- **Site:** The default SharePoint site to connect to
- **Document Library:** Choose the document library to scan in to.

### *SharePoint Destination Component Configuration Steps*

1. Enter the SharePoint server URL, Username, Password, and Domain fields. Click the “Connect to SharePoint” button. A blue ring around the button will indicate the connection attempt. If it makes a successful connection the “Select Site...” and “Select Library...” button will become active. If the connection is not successful, you will be displayed another pop-up window indicating any issues in connection. Fix any issues and attempt to connect again. If connection fails again, please contact your SharePoint administrator.
2. Once successfully connected, click the “Select Site...” button. A pop-up window will display listing the sites available. Select a site from the list by double clicking the site name.
3. Next, click the “Select Library...” button. Another pop-up window will display listing the available document libraries and lists available. Select a library or list by double click the name.
4. Once a library or list is selected, the right-hand side of the component settings pane will be populated and list the index fields required for that list or library. If desired, click the “Create Index Fields Automatically” button to create an Index Data Entry component with these fields automatically populated. These fields will now appear in the Workflow Fields list and will be available for use throughout the workflow.

### 7.3.7 WebDav Destination Component



The WebDAV Destination Component is used to route documents to an existing WebDAV (Web Distributed Authoring and Versioning) destination. All configuration settings inside the WebDAV Destination Component are **required**.

- **File Name:** The name of the scanned document(s)
- **Server Settings:** Settings used to connect to the WebDAV server
  - **Host:** Host name of the WebDAV server
  - **Port:** Port used by the WebDAV server
  - **Use SSL (HTTPS):** Check if the WebDAV server requires an SSL connection
  - **Site:** The path to the destination folder to store the scanned document(s)

- **User Credentials:** Credentials used to connect to the WebDAV server.
  - **User Name:** Username to authenticate to the WebDAV server. This can be pulled using the AD Authentication Component and having the user either log in through DMConnect or if the MFP is using Extension Authentication.
  - **Password:** The password associated with the WebDAV User Name for authenticating to the WebDAV server.

**NOTE: DMConnect CANNOT retrieve a user's password from LDAP to use in the WebDAV or any other component.**

### 7.3.8 Email Destination Component



The Email Destination sends the finished document as an attachment in an email. Every field in Email destination can be either manually typed in, or a variable that is drag and dropped. Select the SMTP settings on the right-hand side that you would like to use to send the email. For more information about configuring SMTP settings, please refer to the [SMTP Settings section](#).

## 7.4 File Format Conversion Components

These components are the last node in a workflow or workflow branch and are the last stop of the workflow process.

### 7.4.1 Text Format Conversion Component



The Text Format Conversion Component will produce a plain text file with a variety of format and styling options depending on which type of Text file is chosen. **This format is only available in the Powered by OmniPage or PRO versions of DMConnect.**

<b>Comma Separated Text</b>	Comma separated values, suitable for extracting data from a form.
<b>Formatted Text</b>	Decolumnized text with paragraph styling.
<b>HTML 3.2</b>	Standard markup language
<b>HTML 4.0</b>	Standard markup language
<b>Text</b>	Text without paragraph styling
<b>Text with line breaks</b>	Decolumnized text with paragraph styling and line breaks.
<b>Unicode Comma Separated Text</b>	Enable Unicode encoding for comma separated values, suitable for extracting data from a form.

<b>Unicode Formatted Text</b>	Enable Unicode encoding for decolumnized text with paragraph styling.
<b>Unicode Text</b>	Enable Unicode encoding for generated Text files.
<b>Unicode Text with line breaks</b>	Enable Unicode encoding for decolumnized text with paragraph styling and line breaks.
<b>XML</b>	Markup language that defines a set of rules for encoding documents

#### 7.4.2 (Microsoft) PowerPoint Conversion Component



The PowerPoint Conversion Component will produce a Microsoft PowerPoint file.

**This format is only available in the Powered by OmniPage or PRO versions of DMConnect.**

<b>Microsoft PowerPoint 97</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 97.
<b>Microsoft PowerPoint 2007</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 2007.
<b>Microsoft Publisher 98</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 98.

#### 7.4.3 (Microsoft) Word Conversion Component



The Word Conversion Component will produce a Microsoft Word file. **This format is only available in the Powered by OmniPage or PRO versions of DMConnect.**

<b>Microsoft Office Open XML Format Document</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 2007.
<b>RTF Word 2000</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 2000.
<b>Microsoft Word WordML</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 2007.
<b>WordPad</b>	Can be opened by all versions of WordPad.
<b>WordPerfect 9,10</b>	Can be opened by all versions of WordPerfect, starting with 9.

#### 7.4.4 (Microsoft) XPS Conversion Component



The XPS Conversion Component will produce a Microsoft XPS file. **This format is only available in the Powered by OmniPage or PRO versions of DMConnect.**

<b>XML Paper Specification</b>	Can be opened by all XPS viewer installed by Windows Operating System
<b>XPSsearchable</b>	Can be opened by all XPS viewer installed by Windows Operating System

#### 7.4.5 Searchable PDF Conversion Component



The Searchable PDF Conversion Component will produce an advanced Searchable PDF file. **This format is only available in the Powered by OmniPage or PRO versions of DMConnect.**

<b>PDF</b>	PDF file contains text only. The PDF file can be viewed and searched in a PDF viewer and edited in a PDF editor.
<b>PDF – Edited</b>	Same as PDF, uses True Page formatting option to produce best possible editable PDF. The PDF file can be viewed, searched and edited.
<b>PDF with image on text</b>	The PDF file is viewable only and cannot be modified in a PDF editor. The original images are exported, but there is a linked text file behind each image, so the text can be searched. A found word is highlighted in the image.
<b>PDF with image substitutes</b>	Substitution: Same as PDF, but words containing reject and suspect characters have image overlays, so these uncertain words display as they were in the original document. The PDF file can be viewed, searched and edited.

#### 7.4.6 PDF Conversion Component



The PDF Conversion Component will produce a PDF file.



### 7.4.7 (Microsoft) Excel Conversion Component



The Excel Conversion Component will produce a Microsoft Excel file. **This format is only available in the Powered by OmniPage or PRO versions of DMConnect.**

<b>Microsoft Excel 2003, XP</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 2003.
<b>Microsoft Excel 2007</b>	Can be opened by all versions of Microsoft Office, starting with Microsoft Office 2007.

### 7.4.8 Basic Searchable PDF Conversion Component



The Basic Searchable PDF Conversion Component will use the Basic OCR Add-On to produce a searchable PDF. The basic OCR engine is an entry-level character recognition engine that can produce searchable PDFs. However, this module is not recommended for accuracy sensitive environments.

## 7.5 Image Processing Components

### 7.5.1 Form Recognition Component



The Form Recognition component automatically extract data from paper forms. The following sequence of steps must be followed to setup Form Recognition.

***The Form Recognition Component is only available in DMConnect PRO.***

#### *Obtain Form Samples*

An electronic version of a paper form is required to create the form template library, and to be used in DMConnect PRO. It is recommended to prepare at least two samples per form – one to build the template and the other to test the data extraction.

#### *Create Template*

Form template library (.ftl) file is required to extract paper form data through Form Recognition Component. To create form template library, use Nuance Forms Template Editor.

1. Launch "Forms Template Editor" by selecting the menu Configure -> Nuance FTE
2. Create new template.
3. For each template, add zones to match scan document with this template.

4. For each template, specify the location of data to be extracted.
5. Test the data extraction by loading several test images. Adjust template as necessary.
6. Export library as Form template library (.ftl) file

For more information about configuring form template library, please refer to Nuance Forms Template Editor Help.

### *Configure Workflow*

After dragging the Form Recognition component from the component list and drop it onto the Workflow Canvas, click on the Form Recognition component to show its settings in the Component Configuration Pane.

### *Form Recognition Configuration Settings*

<b>Form Template Library (.ftl) (button)(required)</b>	Use to load a form template library.
<b>Zones</b>	Define which data to be extracted from the form. It can be load from the .ftl file or can be entered manually.
<b>Minimum Confidence</b>	A minimum confidence is used to determine acceptance level to match the scan document with form template. Lower the level (slide toward left), less accuracy is needed to determine whether scan document matches the form template.
<b>Split After Template Pages</b>	Check to split the scan job upon finding a page that matches a form template.
<b>Reject document if there are not template matches</b>	Check to reject a document if it doesn't match a template. The document will be moved to the C:\DMConnect\Failed folder.

### *Use Extracted Data*

All the variables listed under Zones List are the expected data to be extracted from the form. These variables will be available for use under Workflow Fields dropdown menu to all the component after form recognition.

### 7.5.2 Split Document Component



The Split Document Component will split one scan job into parts based on file size or pages scanned. For example, if the Split Document Component is configured to “Split Every: 5 Pages”, a 20-page scan job will be split into 4 parts (4 files of 5 pages). Configuring the Split Document Component to split based on a specific file

size is useful if sending to an email destination and the email server has file size restrictions. You may also use index data to dynamically set how to split a scan job.

### 7.5.3 Stamping Component



The Stamping Component can be used to place either a custom stamp message or a Bates stamp on each page of a scan. Texting styling and stamp box options can also be configured.

#### *Stamp Message*

Selecting Stamp Message will allow for either user-defined text or index data to be stamped on each page of a scan.

#### *Stamp Bates*

Selecting Stamp Bates will create a Bates stamp on each page of a scan job.

- **Key:** The Display Name of the Bates Stamp that will display in the Workflow Fields list.
- **Starting:** The starting numeric digit for the Bates Stamp
- **Increment:** How many digits to increment the Bates Stamp on each page
- **Width:** How many digits the Bates Stamp should be.
- **Reset:** Resets the Bates Stamp counter to this value every time the stamp is used.
- **Prefix:** Will append information entered here to the beginning of the stamp text.
- **Suffix:** Will append information entered here to the end of the stamp text.

#### *Text Styling and Box Options*

- **Text Styling**
  - **Font:** Select the font for the stamp or message. Fonts are restricted to whichever fonts are installed on the server.
  - **Font Size:** Choose the font size
  - **Font Style:** Choose the font style (Regular, Italic, Bold, Bold Italic)
- **Box Options**
  - **Position:** Choose the desired page position to place the stamp box
  - **Width:** Enter the width for the stamp box in inches
  - **Height:** Enter the height for the stamp box in inches
  - **Margin:** Enter the margin for the stamp box
  - **Draw Position:** Places a border around the stamp box
  - **Inverted (White on Black):** The stamp box will be black, the stamp text will be white
  - **Transparent Background:** Removes the background color of the stamp box

### 7.5.4 Blank Page Removal Component



The Blank Page Removal Component is used to either remove blank pages from a scan or split the scan upon finding the blank page. A Threshold setting is used to determine how discretionary DMConnect is when detecting a blank page.

### 7.5.5 1D-Barcode Recognition Component



Workflow can be configured to detect barcodes on a document and read their values. Barcode values can then be used to name files and folders or in metadata stored in an XML file or database. Barcodes can also be used as separator sheets used to mark the beginning or end of documents that are scanned together in a

single batch.

#### Scanning for 1 Dimensional (1D)/Linear Barcodes

To scan for a 1-dimensional (1D) barcode, simply drag the 1D-Barcode Recognition component from the component list and drop it onto the Workflow Canvas. Click on the 1D-Barcode Recognition component to show its settings in the Component Configuration Pane.

<b>Name (required)</b>	Enter a unique name for the barcode		
<b>Type (required) (default: Any)</b>	Select the type of barcode (also known as Symbology) to scan for. If the barcode scanner encounters other types of barcodes on the page, the will be ignored.		
	Any Industrial 2 of 5 Interleaved 2 of 5 Lata 2 of 5 Matrix 2 of 5	Code 39 Codeabar DataLogic 2 of 5 Code 128 Code 93	EAN 8 EAN 13 EAN 128 UPC Version A UPC Version E
<b>Import (button) (optional)</b>	Use the import button to import an image of an existing barcode (.tif). The component will automatically detect the barcode type from the sample.		
<b>Barcode Instance (optional)</b>	<i>Page (default:0)</i>	Page the barcode page will correspond to. A value of zero corresponds to 'Any page in the document'. A non-zero value is used to indicate a specific page in a multi-page document. Barcodes on other pages will be ignored.	
	<i>Instance (default:0)</i>	Barcode instance on a page. Zero corresponds to 'Any barcode on page'. A non-zero value specifies the specific barcode instance that should be read. All other instances will	

		be ignored. Instances are counted from top to bottom and left to right.
<b>Barcode Value Pattern (optional)</b>	<i>Select barcodes that match pattern</i>	Define a data pattern using regular expression syntax that DMConnect will use when scanning for barcodes. Barcode values that conform to the pattern would be selected for processing and others would be ignored. More information on regular expression could be found on Microsoft's website: <a href="#">Regular Expression Language - Quick Reference</a> .
	<i>Test String</i>	This field allows you to test the regular expression pattern by entering possible barcode values. If the value matches the pattern, a green check mark would appear, if it does not, a red exclamation point would appear instead.
<b>Job Separation (optional)</b>	<i>Split Job</i>	Check to split the scan job upon finding a barcode that matches specified criteria.
	<i>Barcode sheet is...</i>	Indicate whether the page containing the barcode is to be considered the first page of a document or the last.
	<i>Remove barcode page</i>	Check to remove the page containing the barcode page. This is useful when removing pages containing separator sheets.

Once a barcode has been created and configured, its name will appear in the Workflow Fields list and can be dragged and dropped into other components in the workflow.

**7.5.6 2D-Barcode Recognition Component**



To scan for a 2-dimensional (2D) barcode, simply drag the 2D-Barcode Recognition component from the component list and drop it onto the Workflow Canvas. Click on the 2D-Barcode Recognition component to show its settings in the Component Configuration Pane.

**The 2D-Barcode Recognition Component is only available in DMConnect PRO.**

Since 2D-barcode typically contain a large amount of data, the component must be configured correctly to extract data contained in it.

## 2 Dimensional (2D) Barcodes Configuration Settings

<b>Name (required)</b>	Enter a unique name for the barcode	
<b>Type (required)</b>	Select the type of 2-D barcode: QRCode, PDF417	
<b>Import Image (button) (required)</b>	Use to import an image of an existing barcode (.tif, .jpg, .pdf). When the 2D-barcode sample is loaded, the raw data contained in it is displayed under 'Barcode Text'	
<b>Barcode Text</b>	Displays the raw barcode data that is extracted from a 2D-barcode. Highlights regions of text extracted by zone definitions.	
<b>Data Zones</b>	Data contained in the barcode can be extracted by specifying start and end positions of text required in the workflow. Extracted data is available for use within the workflow. Refer to section below on how to configure each zone.	
<b>Auto generate fields with separator</b>	Click the "Generate" button to create zone definitions automatically, given a data separator character.	
<b>+ Add button</b>	Click to create a new zone definition.	
<b>Job Separation</b>	Split Job	Check to split the scan job upon finding a barcode that matches specified criteria.
	Barcode sheet is...	Indicate whether the page containing the barcode is to be considered the first page of a document or the last.
	Remove barcode page	Check to remove the page containing the barcode page. This is useful when removing pages containing separator sheets.

<b>Name</b>	Enter a unique name for the zone.
<b>Start</b>	The point from which zone beginning is calculated.
<b>From beginning of text</b>	Zone will start at the first character in the barcode value. This selection is typical for the first zone.

<b>After previous match</b>	Zone will start immediately after the end of the previous zone. This selection is typical for subsequent zones.
<b>Position</b>	Define how many characters to skip to reach the zone beginning.
<b>After <u>n</u> occurrences of <u>chars</u></b>	Skip past n occurrences of given character(s).
<b>After <u>n</u> characters</b>	Skip n characters
<b>End</b>	The point from which zone ending is calculated.
<b>After starting point</b>	Zone will end somewhere after the start position.
<b>From beginning of text</b>	Zone will end at some point after the first character of the barcode value.
<b>From the end of the previous match</b>	Zone will end at some point after the end of the previous match.
<b>End of text</b>	Zone end is relative to the end to end of barcode value. The end point is computed in reverse, starting with the end of text.
<b>Position</b>	Define how many characters to skip to reach the zone ending.
<b>Before <u>n</u> occurrences of <u>chars</u></b>	Skip past n occurrences of given character(s).
<b>__ characters from start</b>	Skip n characters

Text captured by each zone definition is color-coded in the Barcode Text area.

Once the component has been created and configured, the zone names will appear in the Workflow Fields list a can be dragged and dropped into other components in the workflow.

### 7.6 Workflow Components

### 7.6.1 Notification Component



The notification component will send an email upon a successful or failed job has been completed. The notification component must be added to the beginning of each processing branch. If an error occurs at any point past the notification component, it would trigger an email notification.

- a) **To:** Email destination(s) where the notification will be sent. Allows drag-and-drop of index data.
- b) **Subject:** Text for the notification email's subject line. Allows drag-and-drop of index data.
- c) **Body:**
  - i. **Success Message:** Text for the notification email's body when a workflow completes successfully. Allows drag-and-drop of variable index data.
  - ii. **Failed Message:** Text for the notification email's body when a workflow fails. Allows drag-and-drop of variable index data.
- d) **Send only on failure:** Check to only send a notification on processing failure.
- e) **Attach documents:** Check to include a copy of the scanned image

### 7.6.2 Return Component



The Return Component is used in conjunction with the Queue for Approval Component. It's used to move the workflow back to the previous Approval Queue if the recipient does not respond or if the message cannot be delivered. A limit on the number of retries and a message can be configured to alert parties of the issue.

### 7.6.3 Branch Workflow Component



Workflows in DMConnect can be duplicated or "branched" for extended image processing and document routing. To accomplish this, use the Branch Workflow Component. Just like other components, the Branch Workflow Component can only be placed before and after certain components in the workflow process. The Branch Workflow Component cannot be placed before any user interface components.

For example, the following workflow will ask the user to input index data then remove blank pages from the scan, create a Word Document to be delivered to a folder destination, then take the same scan image and create a Text document to be delivered to a database destination.

The Branch Workflow Component Icon (indicated with a green circle) tells the workflow where to "branch off" of the main workflow and do additional processing. In this workflow, the user will only have to scan once and input index data once at the MFP and the workflow will create two different file formats using the same index data and deliver both to their respective destinations.



The Branch Workflow Component can be configured to only branch off when certain conditions are met. These conditions can be entered as a comparison or an expression. When a condition is met, you can tell the Branch Workflow component to either continue through the branch or to skip the branch.

#### *If value meets condition*

Comparison conditions compare one expression (Condition A) with another (Condition B). Both sides of the comparison condition **are required** for the component to function properly. Index data can also be used in these conditions.

The Comparison Type dropdown is used to choose how to compare Condition A to Condition B:

- **Equals (case insensitive)** – Compares if A *EQUALS* B regardless of upper or lowercase characters.
- **Equals (case sensitive)** – Compares if A *EQUALS* B and factors in character case.
- **Matches Pattern** – Used to see if A matches a pattern in B. Read “matches patterns” as the keyword *LIKE*. With this condition type, you want to see if A is *LIKE* B.
- **Begins With** – Like the Matches Pattern type, this is used to check if B *BEGINS WITH* A.
- **Ends With** – The same but opposite of Begins With. Used to check if B *ENDS WITH* B.

#### *True or false expression*

The True or false expression can be used to direct a workflow based on an expression. You can drag and drop index data in the field or simply write your own expression. If the condition is met, then the result will be TRUE. If the condition is not met, then the result will be FALSE.

#### *Workflow Direction*

Once a condition has been declared you can use the two arrow diagrams to the right to determine what will happen when the condition is or isn't met. A checkmark with a green arrow indicates the direction the workflow will follow. No checkmark with a red arrow indicates that the workflow will not follow that branch.

### 7.6.4 Queue for Approval Component



The Queue for Approval Component is used to create a document approval procedure. Sub-branches called “Actions” can be added with their own processing components and destinations. These Actions will appear as buttons in the DMConnect Portal when a user signs in to view their queue. Depending on which button is pressed the workflow will be processed differently.

## 7.7 Data Processing Components

### 7.7.1 Data Transform Component



The Data Transform Component can be used to convert data value formats to another format for database storage or value format consistency. The input takes a piece of index data, choose a Transform Type from the dropdown menu, and the output field creates a second piece of index data with the transformed data.

- **Input:** The input to be transformed. This can be a piece of index data.
- **Transform Type:** The type of transformation to be done to the Input. See below examples for details.
- **Output:** The name of the index data to create

<b>Convert to UPPERCASE</b>	<i>Description</i>	Converts all characters to their uppercase equivalents																																					
	<i>Example</i>	<b>INPUT:</b> "John Doe" <b>OUTPUT:</b> "JOHN DOE"																																					
<b>Convert to lowercase</b>	<i>Description</i>	Converts all characters to their lowercase equivalents																																					
	<i>Example</i>	<b>INPUT:</b> "John Doe" <b>OUTPUT:</b> "john doe"																																					
<b>Remove leading and trailing blank space</b>	<i>Description</i>	Removes any blank space before and after the input																																					
	<i>Example</i>	<b>INPUT:</b> "{sp}{sp}John Doe{sp}{sp}" <b>OUTPUT:</b> "John Doe"																																					
<b>Extract part of a text</b>	<i>Description</i>	Extracts a group of characters from within the string. The "From" input defines where to start from and the "To" input defines where to stop.																																					
	<i>Example</i>	<p><b>INPUT:</b> "My name is John Doe"</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>M</td><td>y</td><td></td><td>n</td><td>a</td><td>m</td><td>e</td><td></td><td>i</td><td>s</td><td></td><td>J</td><td>o</td><td>h</td><td>n</td><td></td><td>D</td><td>o</td><td>e</td> </tr> <tr> <td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td><td>08</td><td>09</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td> </tr> </table> <p><b>FROM:</b> 4 <b>TO:</b> 15                      <b>OUTPUT:</b> "name is John"</p>	M	y		n	a	m	e		i	s		J	o	h	n		D	o	e	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
M	y		n	a	m	e		i	s		J	o	h	n		D	o	e																					
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19																					
<b>Remove illegal path character(s)</b>	<i>Description</i>	Removes any illegal characters from the input that will prevent the scan from being saved for a folder from being made																																					
	<i>Example</i>	<b>INPUT:</b> "\*&\$John/*!Doe" <b>OUTPUT:</b> "JohnDoe"																																					

### 7.7.2 Script Component



The Script Component allows custom code to be executed by the workflow. It can be dropped on both the Capture and Processing Branches of the workflows. The script works by passing two dynamic variables to the function, one input and one output.

Define the variables to be used by the script.

1. **Input Variables:** Here is where you can define the list of variables that will be passed in to the script. The left column is the variable name, and the right column is its value.
2. **Output Variables:** Define the names of the output variables that DMConnect will expect to be defined in the output object. These values will turn into Drop Fields available to other components.

There are two ways to define a script. Defining it inline or importing an external source.

#### *Inline*

DMConnect Studio allows you to define the method directly in the application. The method signature is already provided, so you just need to define the body. Inline scripts are designed to be simple data manipulation, therefore they only have access to standard .NET 4.6 namespaces. If you need to import a class, you must use an external dll.

#### *External*

You can also select a file (.cs or .dll) to import. Once you have selected the file, the drop down with a list of classes will be populated. Upon selecting a class, every method with the supported signature will be enumerated. It must be a static void method with two dynamic objects as its parameters.

Once you have defined your script, you can compile your workflow to verify that the code is valid by selecting *File > Validate*. The workflow will also attempt to validate itself on save.

### 7.7.3 Data Lookup Component



The Data Lookup component is used to connect to an Excel spreadsheet or Database and enumerate through data to pre-populate fields on the MFP panel, or to use data for output variables. This component replaces the Lookup Scripting functionality of older DMConnect versions and allows for easy configuration and execution without the need to have programming knowledge.

Define the variables to be used by the data lookup.

1. **Data Source:** Define the location of data source.
2. **Lookup Conditions:** Define the lookup conditions to be used to lookup for data.

There are two types of data source. Excel and Database.

### Excel Data Lookup

**NOTE: Excel DOES NOT need to be installed on the DMConnect server for perform an Excel Lookup.**

Id DataLookup

Data Source  Excel  Database

Excel File C:\DMConnect\DataFiles\UserInfo.xlsx

Sheet name data

Range e.g A1:D6 to select the range from cell A1 through D6

First row contains header values

Connect...

Column Name	Use in Workflow
id (A)	<input checked="" type="checkbox"/>
firstname (B)	<input type="checkbox"/>
lastname (C)	<input type="checkbox"/>
username (D)	<input type="checkbox"/>
email (E)	<input checked="" type="checkbox"/>
dept (F)	<input checked="" type="checkbox"/>

Column Name	Operator	Value	Data Type	Comparison Option
x id (A)	Same as	<%=f['Employee ID'] %>	String	Case Insensitive

+ ? ⚠

- **Id:** a unique ID for the component.

- **Data Source:** Choose “Excel” as the Data Source
- **Excel File:** Path for Excel file.
- **Sheet name:** Once Excel file is selected, the drop down with a list of sheet name will be populated.
- **Range:** Specify the range in column from:column to format to specify the range to be lookup
- **First row contains headers values:** Check to skip the header row of the Excel sheet.

After filling the data source information, click the “Connect...” button. Upon successful connection, the Excel columns will show as a list along with a check box per row. Checking the Use in Workflow checkbox will create a piece of index data specific to the column name which can be used throughout the workflow.

Below the list of columns is the Lookup Condition Pane which can be used to perform a lookup on the Excel sheet with index data created prior in the workflow.

Column Name	Operator	Value	Data Type	Comparison Option
x id (A)	Same as	<%=f["Employee ID"] %>	String	Case Insensitive

The lookup condition takes a following input data. Multiple conditions can be added using the Add Condition button  and removed by clicking the “X” to the left of the condition row.

- **Column Name:** A dropdown list containing all the columns in the Excel sheet.
- **Operator:** The type of comparison operator
- **Value:** The value used to compare against Excel. If doing a lookup on the Excel sheet this is typically a piece of index data. If simply testing the data retrieval of the Excel sheet a value can be hardcoded in. However, be sure to remove the lookup condition before saving the workflow or the workflow will always be lookup for this hardcoded value.
- **Data Type:** The Data Type dropdown is used to choose type of Value.
- **Comparison Option:** The Comparison Option dropdown is used to determine whether to factors in character case or not when comparing Value to Excel data.

Lookup conditions compare one expression (value at Column Name) with another (Value). Both sides of the comparison condition **are required** for the component to function properly. With the successful lookup, Excel data will turn into Index Data Fields available to other components.

## Database Lookup

DMConnect can connect to either a Microsoft SQL or MySQL data source and perform data lookups to use throughout a workflow. The data source first needs to be added to the Microsoft ODBC Data Source Application as a System DSN. More information about how to accomplish this can be found in [this Microsoft Doc](#).

Id DataLookup

---

Data Source  Excel  Database

Database AdventureWorks

User Name sa

Password ●●●●●●

Type of Database Microsoft SQL Open

Database Table AdventureWorks2014.HumanResources.[Employee] Connect...

---

Column Name	Use in Workflow
BusinessEntityID	<input type="checkbox"/>
DepartmentID	<input type="checkbox"/>
ShiftID	<input type="checkbox"/>
StartDate	<input type="checkbox"/>
EndDate	<input type="checkbox"/>
ModifiedDate	<input type="checkbox"/>

---

Column Name	Operator	Value	Data Type	Comparison Option
x	Same as		String	Case Insensitive

+ ? 🔍

- **Id:** A unique ID for the component.
- **Data Source:** Choose “Database” as the Data Source
- **Database:** Dropdown list of available databases

- **User name:** User name to access database
- **Password:** password to access database
- **Type of Database:** Choose either Microsoft SQL or MySQL database type.
- **Database Table:** Available table for selected database

Like Excel lookup, clicking the “Connect...” button will connect to the database and upon successful connection and lookup, database table column will turn into Drop Fields available to other components.

## 7.8 Default Fields List

The Default Fields list contains a pre-defined set of variables that can be used throughout the workflow process. These variables do not change and will be included with every workflow.

<% Today(MM-DD-YY)	Insert today's date in month-date-year format.
<% Today(MM/DD/YYYY)	Insert today's date in month/date/year format. <b><i>NOTE: This is not suitable for file or folder names as the “/” character is an illegal character.</i></b>
<% Timestamp	A long series of numbers composed from current date and time.
<% RandomString	Insert a random sequence of characters. This is usually added to end of file or folder names to keep them unique.
<% Image file path	Insert the full path of the scanned image file.
<% Image file name	Insert only the file name (without directory) of the scanned image file.
<% Image file type	Insert image file format.
<% Image file size	Insert image file size in bytes.
<% Page Count	Insert the number of pages in the scan job
<% Job Part Number	Sequence number for each split job.
<% MFP IP address	Insert the IP address of the MFP from where the document was scanned.
<% MFP Serial No	Insert the Serial Number of the MFP from where the document was scanned.
<% MFP MAC address	Insert the MAC Address of the MFP from where the document was scanned.
<% MFP Model	Insert the Model Name of the MFP from where the document was scanned.
<% User Domain	Insert the Domain name of the user who scanned the document. The domain name would only be available if Access Lock authentication is enabled at the MFP. If MFP is set to Network authentication, this value

	would be 'Network'. If the MFP is set to Local authentication, this value would be 'MFP_Local'.
<% User Account	Insert the Account Name (ex. <i>jdoe</i> ) of the user who scanned the document.
<% User Name	Insert the Name (ex. <i>John Doe</i> ) of the user who scanned the document.
<% User Email	Insert the Email Address (ex. <i>jdoe@abc.com</i> ) of the user who scanned the document.
<% User's Card Id	Insert the Card ID of the user who scanned the document.

### 7.9 Workflow Fields List

The Workflow Fields list contains custom Index Data Fields, Barcode Fields, and/or Zone fields that were created in either the Index Data Entry, 1D-Barcode, 2D-Barcode, Forms Recognition, or SharePoint Destination components. Once a field has been created and configured it will appear in the Workflow Fields list and will be available for use throughout the workflow. This list is empty by default.

### 7.10 Workflow Resources

The following settings are shared across the entire workflow allowing multiple components to use them. There is no specific place to define each collection, because each component will display the list of settings where applicable.

### 7.11 Folder Access Settings

Certain operations (such as writing files to a network folder) might require the workflow to authentication and impersonate (act on behalf of) a user.

The Folder Access Resource is a collection of credentials that can be defined in the workflow. This list is shared by Folder Browse Component, Folder Destination, Flat File Destination, and Database Destination. The collection will appear on the right-hand side

The screenshot shows a configuration window titled '+ Folder Access Account'. It contains two radio button options: 'Impersonation' and 'Network Login'. The 'Network Login' option is selected. Below the 'Network Login' option, there are two input fields: 'User Name' and 'Password'. The 'User Name' field has a red error message below it that reads 'User name cannot be empty.' The 'Password' field has a red error message below it that reads 'Password cannot be blank.' There is a close button (X) in the top right corner of the dialog.



of the component's details pane. They are only needed when authentication is required to access a folder.

The fields for Domain, User Name, and Password can either be hard coded at the time of configuration or generated by the workflow as shown in the third setting. These fields could come from a user entering them in at the panel or from another component (such as script).

The selected setting for a component is indicated by a green bar on the left (pictured). There is also a "Test Connection" button in the component's detail pane. When you click the "Test Connection" button, it will try to access the folder path defined in the component using the selected credentials.

***"Test Connection" will not work with settings that are using index data as DMConnect will not know this value yet.***

## 7.12 SMTP Settings

Components which send email (Notification Component and Email Destination) share the collection of SMTP accounts. The collection will appear on the right-hand side of the component's details pane. New SMTP Account settings can be added by using the "+SMTP Account" button. Optionally, the Use System SMTP Settings checkbox can be checked to use the SMTP settings configured in the Administrator Utility.

These fields can be hard coded at the time of configuration or generated by the workflow using index data.

- **Server:** The hostname of the SMTP server
- **Port:** The port used by the SMTP server (default is set to Port 587)
- **SSL Enabled:** check this box is the SMTP server uses SSL
- **Sender Name:** Enter a sender name
- **Sender Email:** Enter an email address of sender
- **Username:** Enter a User Name to access Mail Server
- **Password:** Enter a Password to access Mail Server

Use System SMTP Settings

**+SMTP Account**

Server  Server cannot be left blank.  SSL

Sender Name

Sender Email

User Name  Username cannot be left blank.

Password  Password cannot be left blank.

The selected setting for a component has a check mark. There is also a “Test Connection” button in the component’s detail pane. When you click the “Test Connection” button, it will send a test email to confirm the settings are configured correctly.

***“Test Connection” will not work with settings that are using index data as DMConnect will not know this value yet.***

## 8. Designing a Basic Workflow

1. To create a new workflow, select *File > New* from the main dropdown menu. A new workflow will be created, and you should see an image of an MFP and two blue workflow arrows on the workflow configuration canvas.
2. Click on a component from the Components Pane and drag it onto the Workflow Canvas. If the component can be placed, the blue arrow will change to green and the mouse pointer will change to a pencil icon. If the component cannot be placed, the arrow will remain blue and the mouse point will be a circle with a slash through it.
3. To configure a component, select the component icon on the Workflow Canvas. The Component Configuration Pane will change depending on which component is selected. Only one component can be selected at a time.
4. Once all desired components have been added to the workflow, select *File > Validate* from the main menu. DMConnect Studio will evaluate the workflow to make sure no settings are missing. If the workflow is OK, you will receive a “Success!” popup. If there are issues a “Validation Error” popup will display and indicate which component has issues and what the issues are. Fix these issues and perform the validation again until a “Success!” popup is received.

***NOTE: Workflow Validation does not test all settings in the workflow.***

5. Once an OK validation is received, select *File > Save* from the main menu. Workflows will be saved in the default Workflow folder with a file extension of “.wf”. Once the workflow is saved it will available to be used on the MFP panel.

## 9. Support

### **For DMConnect Support:**

**Contact your authorized Kyocera or Copystar Dealer.**

For a listing of authorized Kyocera Dealers:

<https://usa.kyoceradocumentsolutions.com/en/where-to-buy.html>

For a listing of authorized Copystar Dealers:

<https://copystar.com/en/where-to-buy.html>

or

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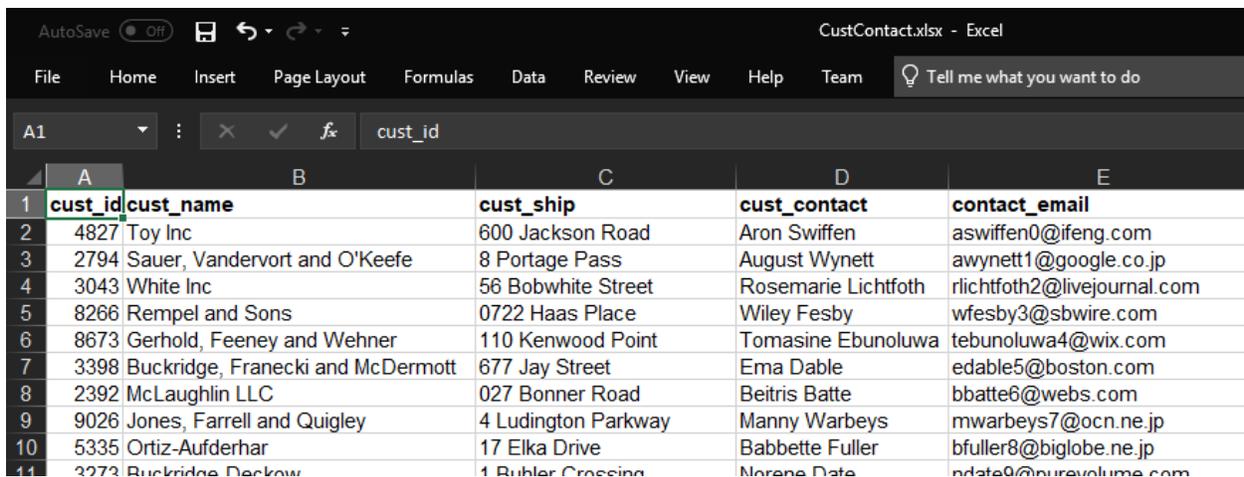
## Appendix 1: Excel Data Lookup Example with Multiple Destinations

**Objective:** Create a workflow that will look up and customer's Contact Email address from an Excel Sheet then send an email with a PDF attachment to the Contact Email address and save a copy of the PDF locally.

### Desired Workflow Operation:

1. User opens "Invoice Processing" workflow on the MFP panel
2. User enters a four (4) digit Customer Number
3. User is displayed the search results
4. User chooses desired customer and scans document(s)
5. When workflow completes a PDF is emailed to the corresponding customer Contact Email address and a PDF copy is stored in the local file system.

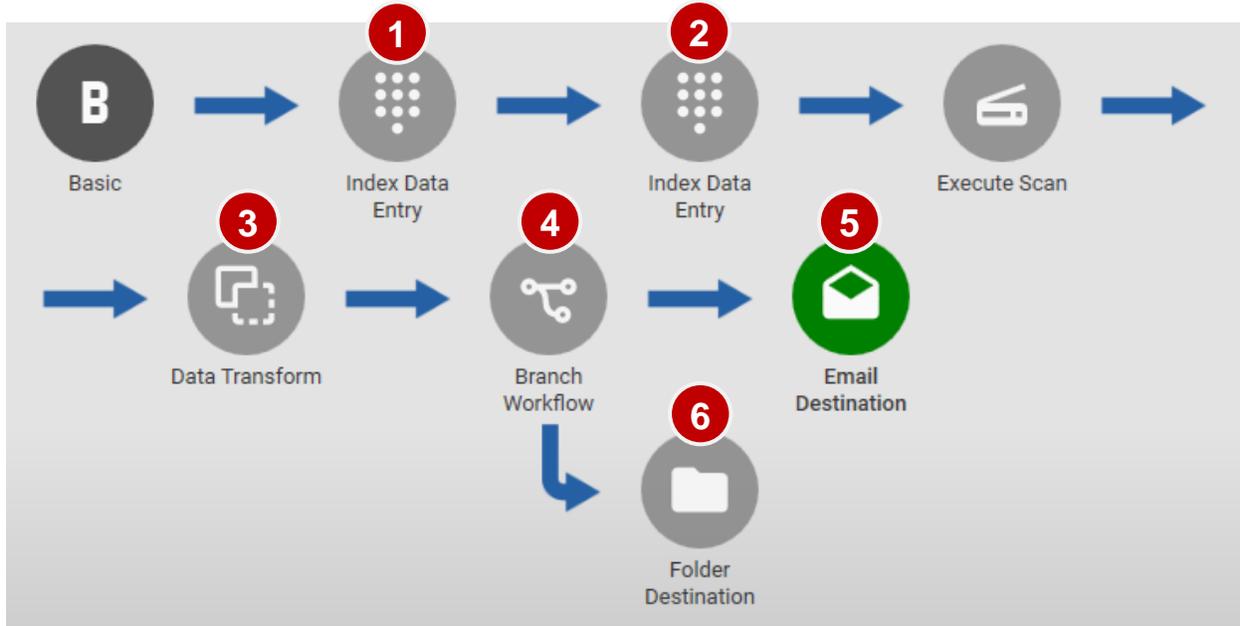
In this example, we are using an Excel file called *CustContact.xlsx* that has one sheet called *data* which holds multiple rows of the following Customer information:



The screenshot shows an Excel spreadsheet titled "CustContact.xlsx" with a ribbon menu (File, Home, Insert, Page Layout, Formulas, Data, Review, View, Help, Team) and a search bar. The spreadsheet contains a table with the following data:

	A	B	C	D	E
1	cust_id	cust_name	cust_ship	cust_contact	contact_email
2	4827	Toy Inc	600 Jackson Road	Aron Swiffen	aswiffen0@ifeng.com
3	2794	Sauer, Vandervort and O'Keefe	8 Portage Pass	August Wynett	awynett1@google.co.jp
4	3043	White Inc	56 Bobwhite Street	Rosemarie Lichtfoth	rlichtfoth2@livejournal.com
5	8266	Rempel and Sons	0722 Haas Place	Wiley Fesby	wfesby3@sbwire.com
6	8673	Gerhold, Feeney and Wehner	110 Kenwood Point	Tomasine Ebunoluwa	tebunoluwa4@wix.com
7	3398	Buckridge, Franecki and McDermott	677 Jay Street	Ema Dable	edable5@boston.com
8	2392	McLaughlin LLC	027 Bonner Road	Beitris Batte	bbatte6@webs.com
9	9026	Jones, Farrell and Quigley	4 Ludington Parkway	Manny Warbeys	mwarbeys7@ocn.ne.jp
10	5335	Ortiz-Aufderhar	17 Elka Drive	Babbette Fuller	bfuller8@biglobe.ne.jp
11	3273	Buckridge, Deckow	4 Bubler Crossing	Morena Date	mdate9@survolum.com

We create the workflow with the following Components:



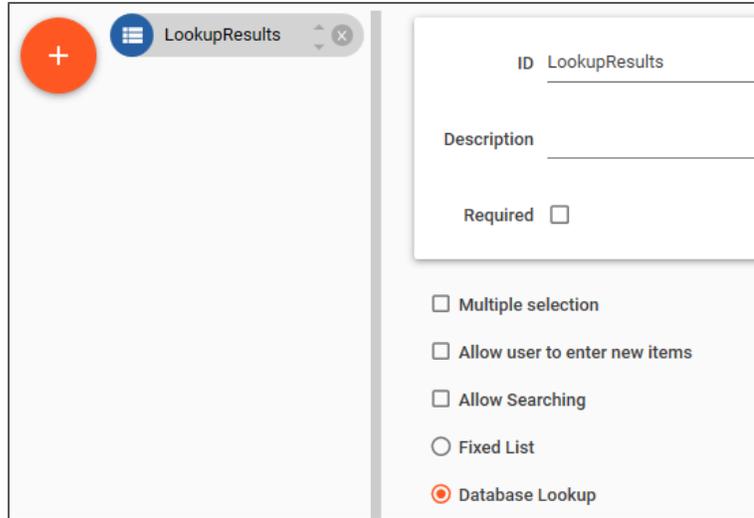
### 1. Index Data Entry Component

with an ID of “Customer Number” which will prompt the user to input the numeric Customer ID. All Customer ID’s in the Excel sheet are four (4) digits long so a Min value of 1111 and a Max value of 9999 is used to prevent users from entering inappropriate values. This field is required for the lookup, so it is marked as Required.

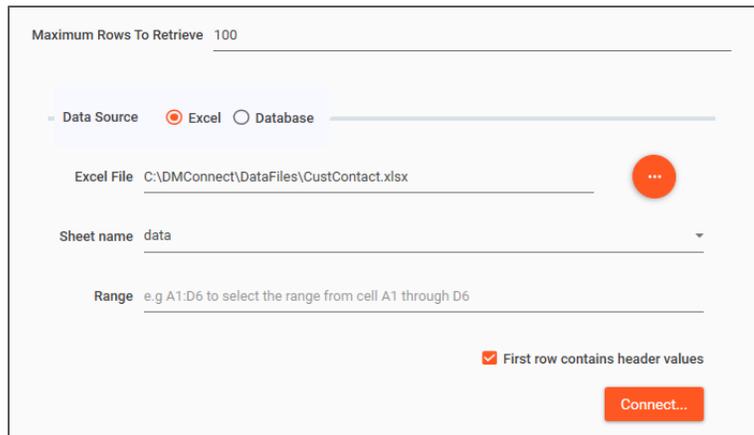
The screenshot shows the configuration interface for the Index Data Entry component. On the left, there is a search bar with a plus sign and a dropdown menu showing '123 Customer Number'. On the right, there is a configuration panel with the following fields:

- ID: Customer Number
- Description: \_\_\_\_\_
- Required:
- Default Value: \_\_\_\_\_
- Min: 1111
- Max: 9999

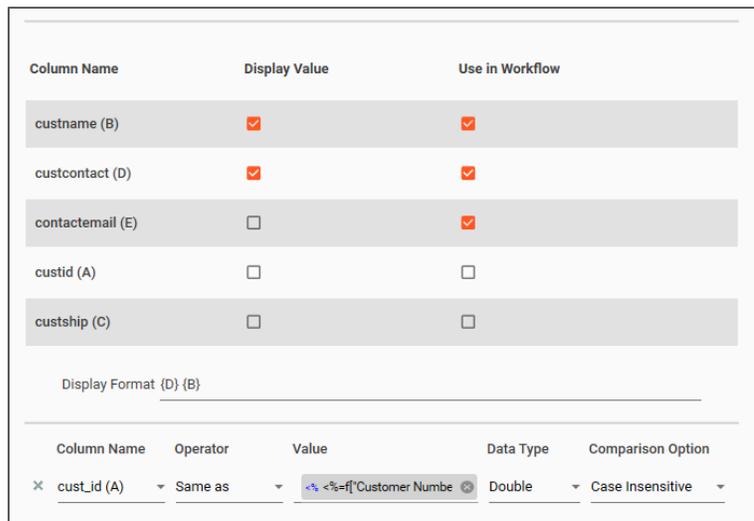
**2. Index Data Entry Component** with an ID of "LookupResults" to perform the Excel Lookup.



We set the Data Source to Excel, browse to the CustContact.xlsx file, chose the sheet called "data", checked the checkbox to indicate our sheet has headers and clicked the Connect... button.

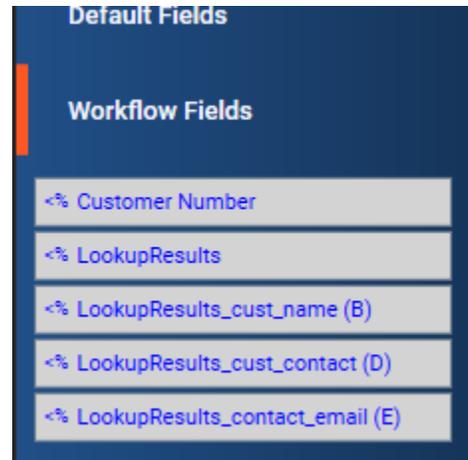


Upon successful connection the Excel columns are populated. We choose which columns to use in the workflow (index data) and which columns to use to format the results and display to the user on the MFP panel.



We are also using the Index Data piece Customer Number we created to query the Excel sheet with.

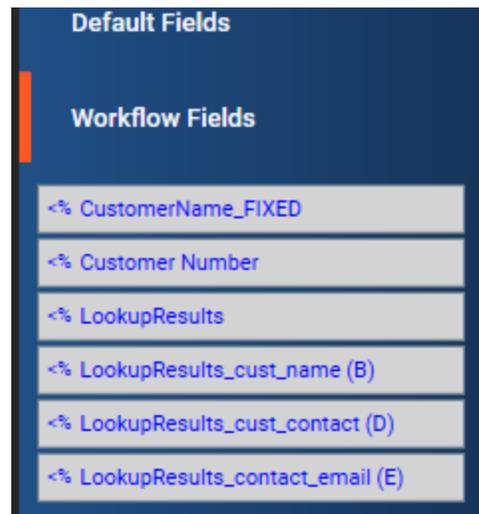
We are now left with the following Workflow Fields we can use throughout the rest of the workflow.



3. Just to be on the safe side, we are also going to use one **Data Transform Component** to remove any illegal path characters that may exist in the **cust\_name** column.

Input	<%= <%=f["LookupResults_DataLookup",0,"B"] %>
Transform Type	Remove illegal path character(s)
Output	CustomerName_FIXED

We use the **LookupResults\_cust\_name (B)** index data piece as input, tell the component to Remove illegal path characters(s) and set the output index data piece name as **CustomerName\_FIXED** which will now appear in our Workflow Fields list.





4. The **Branch Workflow Component** is used to split the job to two different destinations. We leave the radio button Duplicate job always selected as we always want to go to both destinations.

5. The **Email Destination Component** is setup to use the resulting **contact\_email** as the recipient. We also used the **contact\_name** result to help personalize the body of the email.

We are also going to use the SMTP settings configured in the DMConnect Administrators utility.

6. The **Folder Destination Component** is used to send a copy of the scan to the local file system to keep for reference. We use the **CustomerName\_FIXED** index

data piece in the Folder Path since we know the **Data Transform Component** has removed any illegal path characters that would have given us an issue.