

Advanced Scan to SharePoint



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1 Preface

This guide provides the details on how to use the workflow Advanced Scan to SharePoint

About This Guide

This guide is divided into following primary sections:

1. Introduction

This section lays the foundation for understanding the workflow specification

2. Cloud Service Coordination

This section describes how to use OAuth and to do service Coordination with external cloud Services like Box, Dropbox, Google Drive, OneDrive for Business, SharePoint Online

3. Configuring Default Values

This section contains step-by-step instructions on how to configure settings related to Advanced Scan to SharePoint application in User Site

4. Operation of Advanced Scan to SharePoint Application

This section contains step-by-step instructions on how to operate Advanced Scan to SharePoint application on MFP Operation panel

5. Limitations

Product Limitations

6. Appendix

This section contains additional reference materials

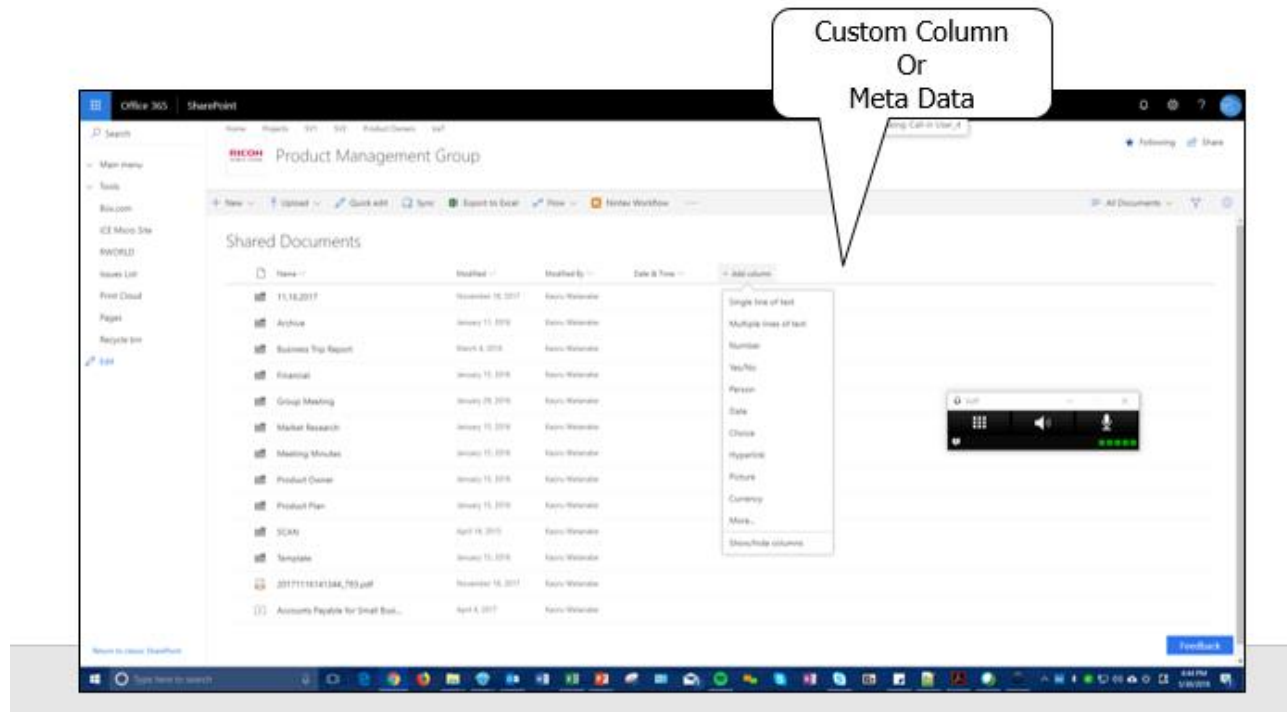
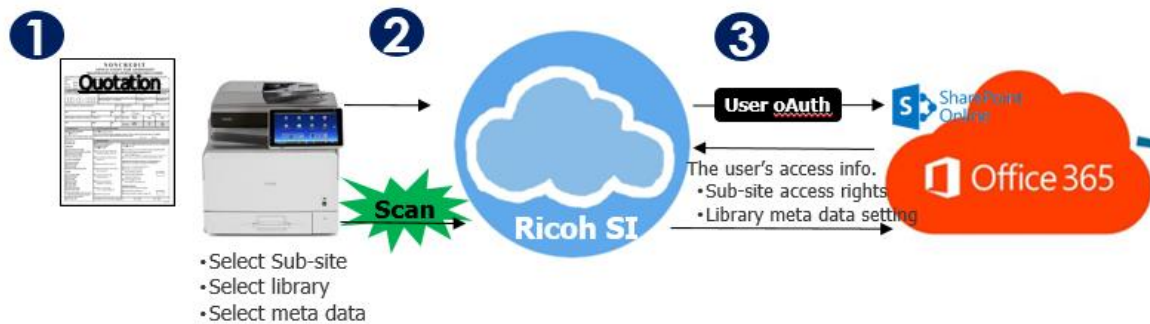
Note: The operation panel screen shot images and User Site images provided in this document are for illustrative purposes only. These images may not reflect the exact image you experience on your multi-functional printer (MFP device).

2 Introduction

What is Advanced Scan to SharePoint workflow?

Advanced Scan to SharePoint is a workflow application developed on Ricoh Smart Integration Platform.

This workflow enables users to easily Scan documents to SharePoint to various SharePoint sites and sub sites to which user has access to. Also, this workflow can obtain the Metadata configured for selected folders, user has an option to enter the values for these metadata.



Workflow Specification

Folder	Folder Selection
File Name	<p>Optional (If entered, this value is used as filename)</p> <p>If filename is left blank, filename is created using the formula programed in User Site (Refer to section 'Configuring default Values')</p> <p>Default Formula:</p> <p>YEAR(NOW()) & "-" & MONTH(NOW()) & "-" & DAY(NOW()) & "-" & HOUR(NOW()) & MINUTE(NOW()) & SECOND(NOW())</p> <p>Example: 2018-12-21-091654.pdf</p> <p>First five Metadata values can be used in filename. By using the variables: Metadata1 Metadata2 Metadata3 Metadata4 Metadata5</p>
Metadata	Set Metadata Values, dynamically obtained from selected folder
OCR	Off, PDF, PDFA, WORD, EXCEL Default: Off
OCR Language	English, French, Spanish, Portuguese Brazilian
Remove Blank Page	OFF, ON Default: OFF

Default values can be configured for Folder, Scan settings, OCR, Remove Blank Page and Filename

3 Cloud Service Coordination

What is Cloud Service Coordination?

Before using Advanced Scan to SharePoint workflow, user need to establish OAuth with Office 365 Cloud service

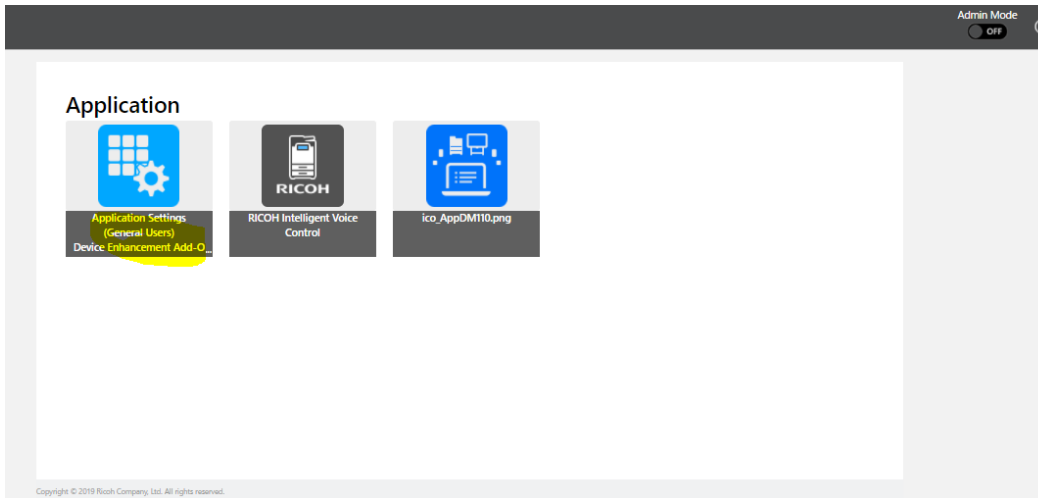
Refer to Smart Integration Cloud Service Coordination User Guide for step-by-step instructions.

4 Configuring default Values

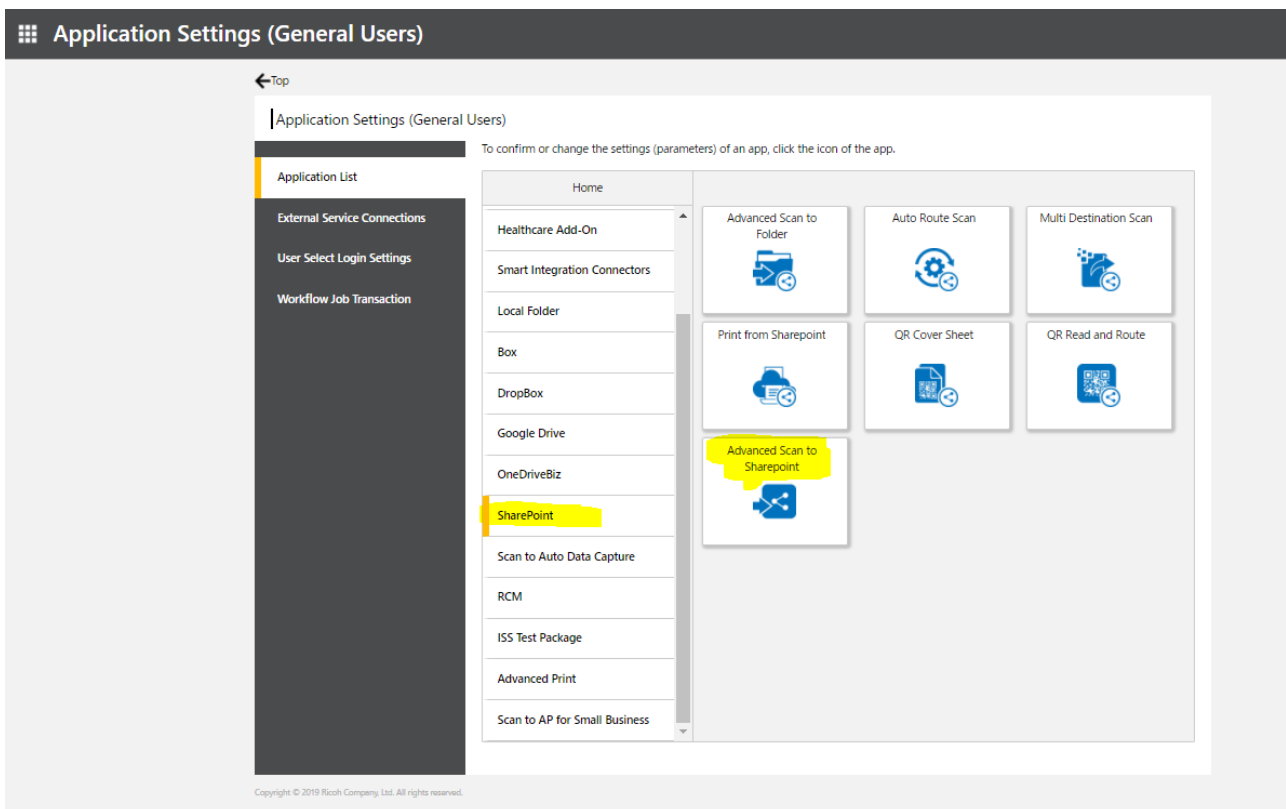
Smart Integration User Configuration Site URL

<https://na.accounts.ricoh.com/portal/login.html>

Login to above site using your credentials.



Click on 'Application settings'



Click on 'Advanced Scan to SharePoint'. This will display a page where all necessary parameters can be configured.

Users)

← Application List

Advanced Scan to Sharepoint

Cancel Save

* Mandatory field

Service Settings

Service Office 365

Folder * Select Folder (Unnamed folder)[Open External Service Connections](#)

Common Settings

Default Screen for Folder Browsing List ScreenDefault Layout for Folder Browse 2 Rows

Default Parameter Settings

File Name Formula * MONTH(NOW()) & DAY(NOW()) & YEAR(NOW()) & "-" & HOUR(NOW()) & MINUTE(NOW()) & SECOND(NOW()) CheckOCR OFFOCR Language EnglishRemove Blank Page OFF

File Name

File Name ☐ Hide in applicationDictionary Label Dictionary Delimiter Import Dictionary

Dictionary	Value

Above settings are available to configure.

Selecting Default Root folder

← Application List

Advanced Scan to Sharepoint

* Mandatory field

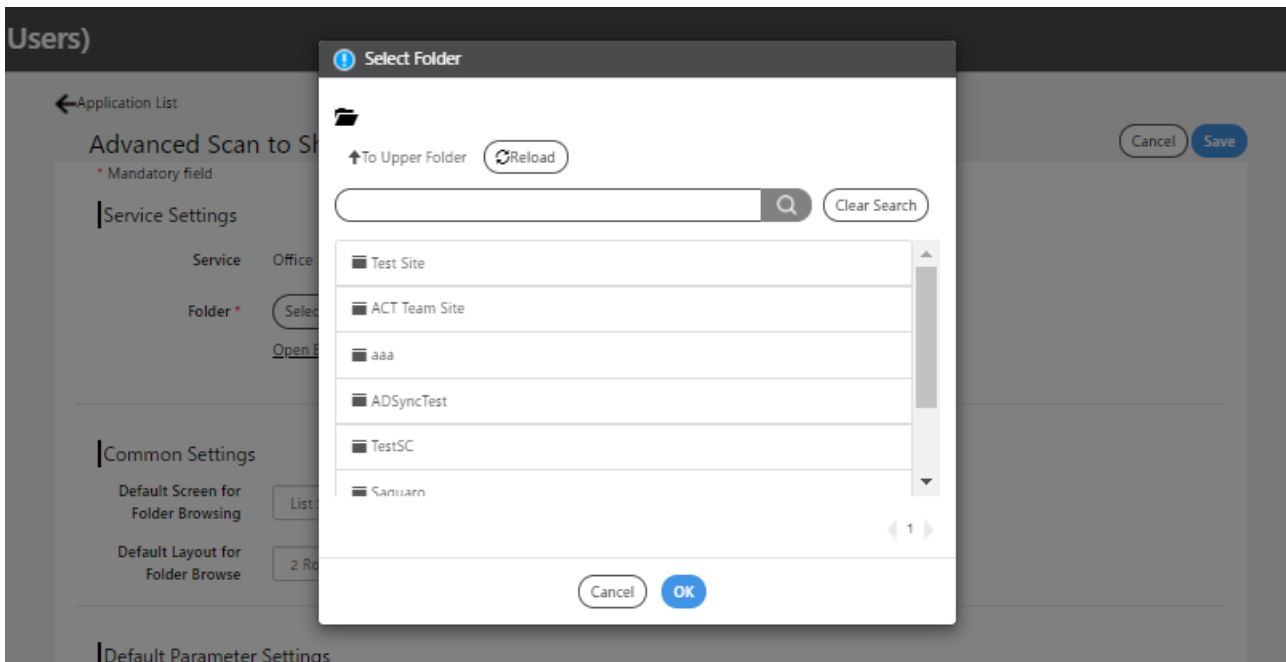
Service Office 365

Folder * Select Folder (Unnamed folder)

[Open External Service Connections](#)

Cancel Save

Click on 'Select Folder' to select required default folder for this application.



Select required folder and click 'OK'

Setting up Default File Name & File Name Key Words

File Name

File Name

☐ Hide in application

Dictionary Label

Dictionary Delimiter

Import Dictionary

Dictionary	Value
PQ	
Invoice	
Sales	

Dictionary Column Width

Setting up File Name Formula

Note: If you want to create Filename based on Formula, do not enter 'File Name' above also leave 'File Name' field blank on Operation panel. User entered File Name has higher priority than the File Name generated using Formula.

Default Parameter Settings

File Name Formula *

Check

1042021-174840

Default Formula:

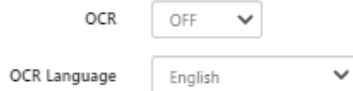
YEAR(NOW()) & "-" & MONTH(NOW()) & "-" & DAY(NOW()) & "-" & HOUR(NOW()) & MINUTE(NOW()) & SECOND(NOW())

Note: Refer to Appendix for Functions related to formula, samples and how to validate formula before saving in User Site.

Note: Click on 'Check' to check the syntax of the filename formula.

OCR & OCR Language

Default value for OCR and OCR Language can be configured.



OCR OFF

OCR Language English

Remove Blank Page

Default value for Remove Blank Page can be configured.

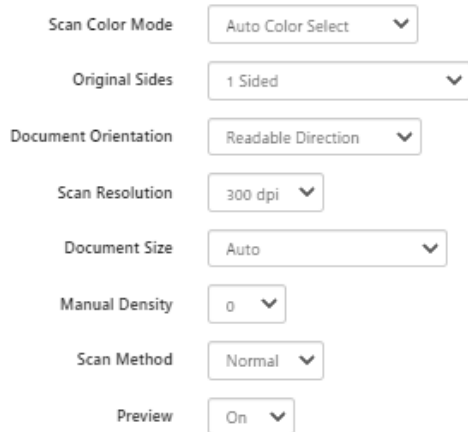


Remove Blank Page OFF

Scan Settings

Default Scan settings can be configured here

Default Scan Settings



Scan Color Mode Auto Color Select

Original Sides 1 Sided

Document Orientation Readable Direction

Scan Resolution 300 dpi

Document Size Auto

Manual Density 0

Scan Method Normal

Preview On

5 Operation of Advanced Scan to SharePoint Workflow Application

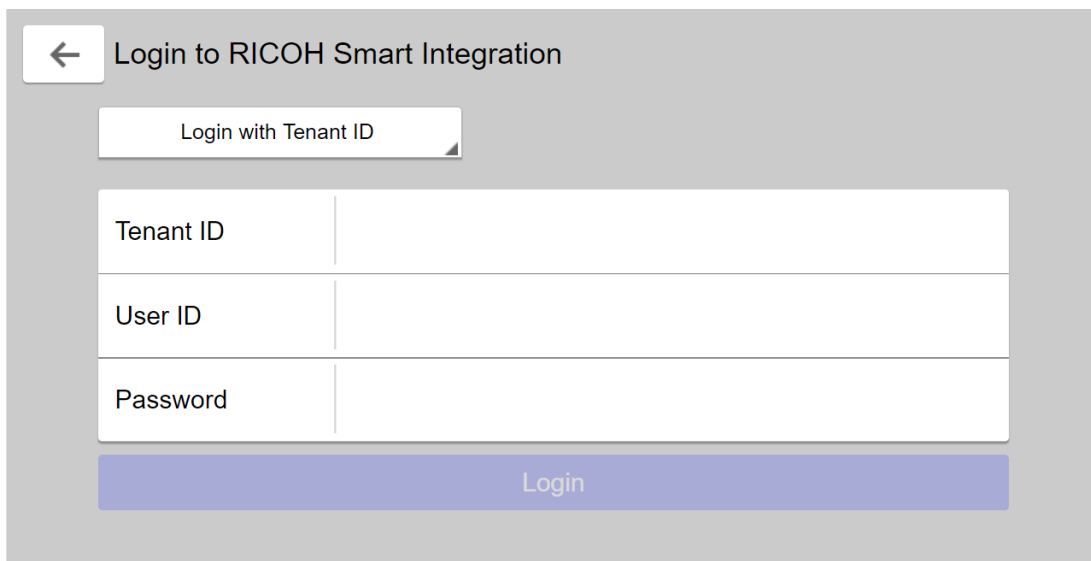
Smart Integration MFP BrowserNX URL

<https://www.na.smart-integration.ricoh.com/si-apps/pub/index.html>

Ricoh Smart Integration Initial Login

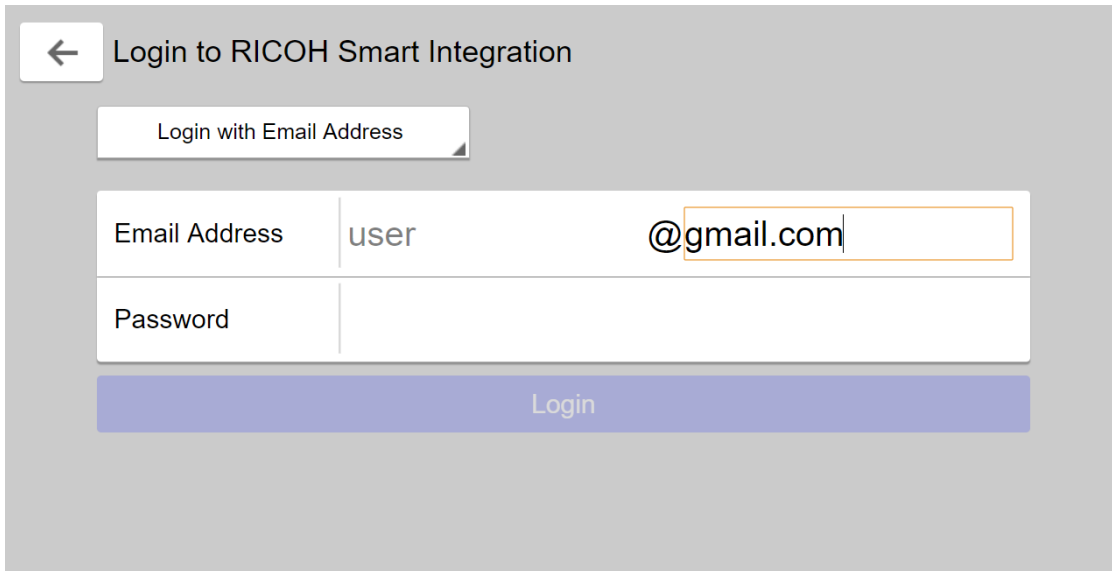
Above URL is available as Bookmark ICON on MFP. Very first time, administrator need to login to the site either using Tenant ID, User ID and Password or Email address and password.

Option 1: Login with Tenant ID



The screenshot shows a login interface for 'RICOH Smart Integration'. At the top, there is a back arrow icon and the title 'Login to RICOH Smart Integration'. Below this, there is a button labeled 'Login with Tenant ID'. Underneath the button is a form with three input fields: 'Tenant ID', 'User ID', and 'Password'. Each field has a corresponding input box to its right. At the bottom of the form is a large blue button labeled 'Login'.

Option 2: Login with Email Address



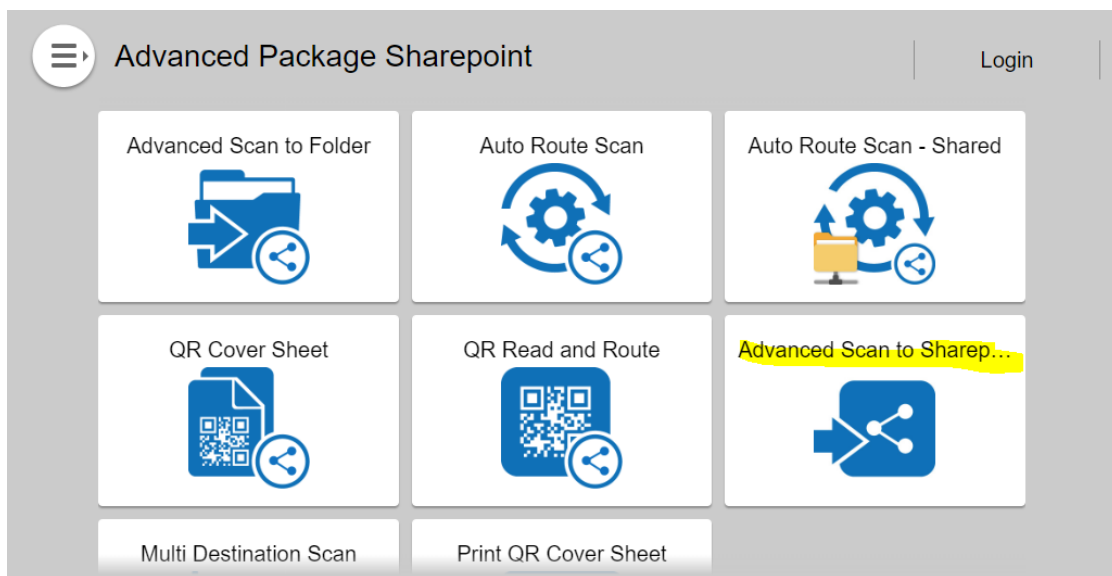
← Login to RICOH Smart Integration

Login with Email Address

Email Address	user	@gmail.com
Password		

Login

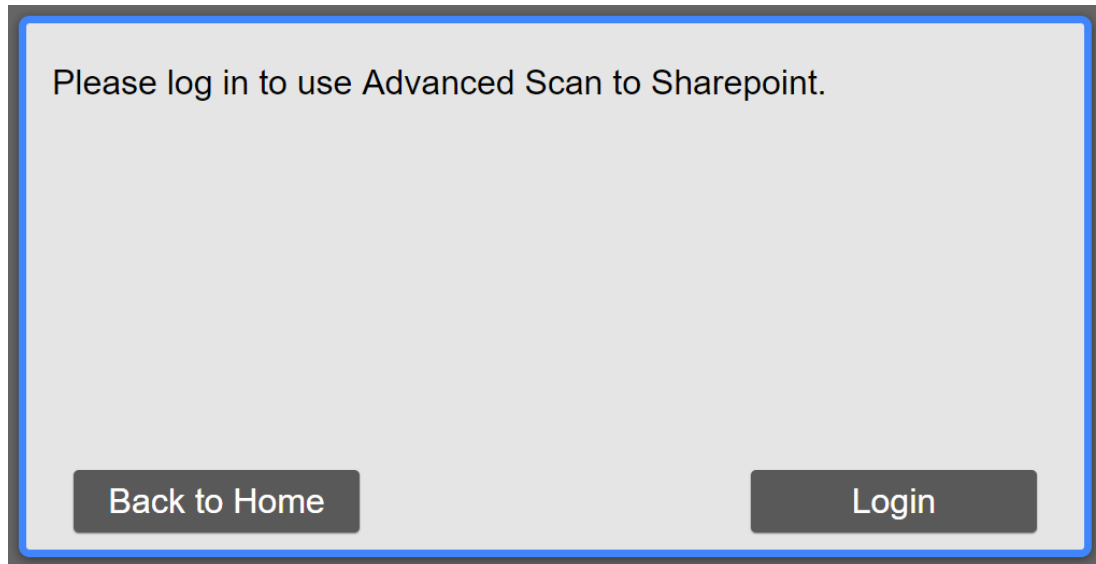
After administrator login subscribed application will be displayed



Above screen shows workflow application related to Box Cloud service.

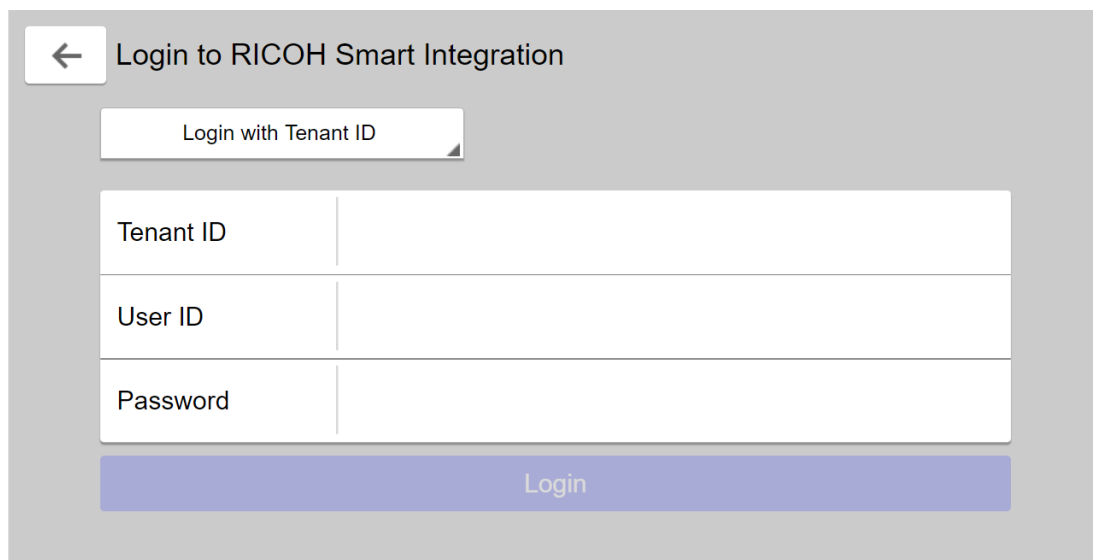
Select 'Advanced Scan to SharePoint' application

End User is requested to Login. Press 'Login' Button to Login.



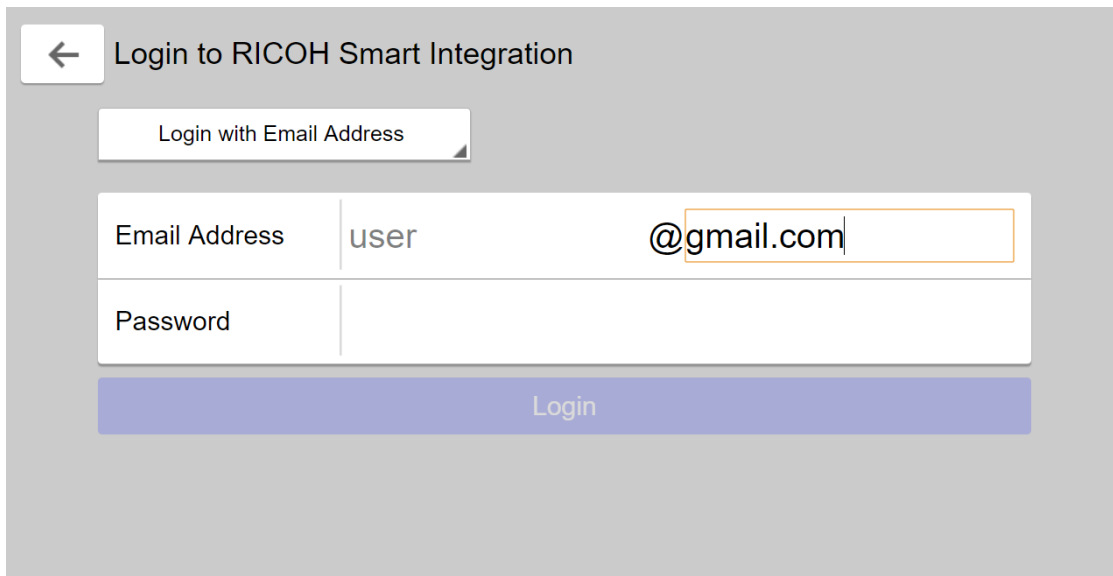
Users need to login to the site either using Tenant ID, User ID and Password or Email address and password.

Option 1: Login with Tenant ID

A gray form titled "Login to RICOH Smart Integration" with a back arrow icon. Below the title is a dropdown menu labeled "Login with Tenant ID". The form contains three input fields: "Tenant ID", "User ID", and "Password". At the bottom is a blue "Login" button.

Login to RICOH Smart Integration	
Login with Tenant ID	
Tenant ID	
User ID	
Password	
Login	

Option 2: Login with Email Address

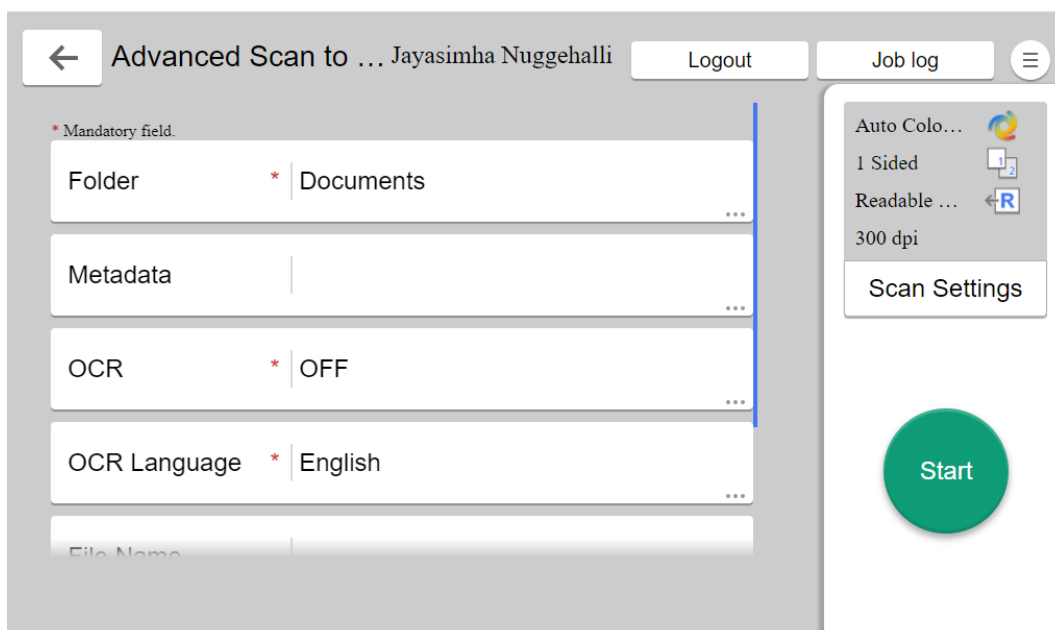


The screenshot shows the 'Login to RICOH Smart Integration' interface. At the top left is a back arrow icon. Below the title is a button labeled 'Login with Email Address'. The main form consists of two rows: 'Email Address' and 'Password'. The 'Email Address' field contains the text 'user' followed by '@gmail.com', which is highlighted with an orange border. The 'Password' field is empty. Below the form is a large blue button labeled 'Login'.

After successful user login 'Advanced Scan folder' Application Screen is displayed

Following Settings are available:

- A. Folder
- B. Filename
- C. Metadata
- D. OCR [Off, PDF, PDF/A, WORD, EXCEL]
- E. OCR Language [English, French, Spanish, Portuguese Brazilian]
- F. Remove Blank Page



The screenshot shows the 'Advanced Scan to ... Jayasimha Nuggehalli' application screen. At the top, there is a back arrow icon, the title 'Advanced Scan to ... Jayasimha Nuggehalli', a 'Logout' button, a 'Job log' button, and a menu icon. The main area contains several settings fields, each with a red asterisk indicating it is mandatory: 'Folder' (set to 'Documents'), 'Metadata', 'OCR' (set to 'OFF'), 'OCR Language' (set to 'English'), and 'File Name'. To the right of these fields is a 'Scan Settings' panel with a green 'Start' button. The 'Scan Settings' panel includes options for 'Auto Color', '1 Sided', 'Readable ...', and '300 dpi'.

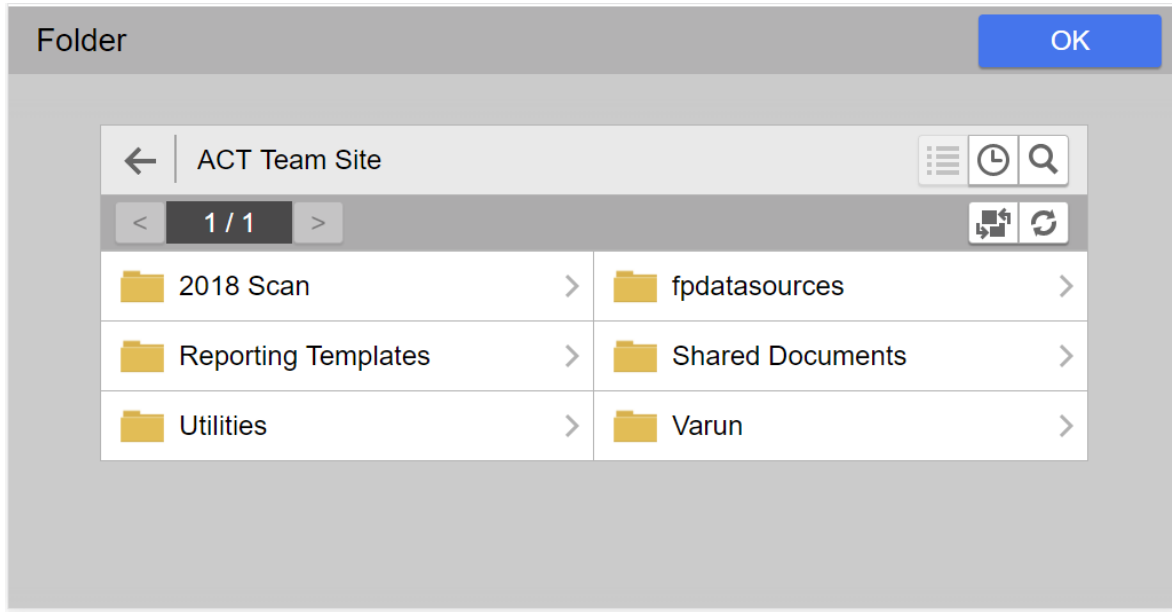
Folder

The screenshot shows the 'Advanced Scan to ...' interface for user 'Jayasimha Nuggehalli'. It includes a 'Logout' button and a 'Job log' link. The main settings area has four rows, each with a label, a red asterisk indicating a mandatory field, and a value: 'Folder' (value: Documents), 'Metadata', 'OCR' (value: OFF), and 'OCR Language' (value: English). Each row has a three-dot menu icon to its right. A yellow highlight is over the 'Folder' field. On the right, there is a 'Scan Settings' panel with options: 'Auto Colo...' (with a color wheel icon), '1 Sided' (with a '1/2' icon), 'Readable ...' (with a blue 'R' icon), and '300 dpi'. Below these is a large green circular 'Start' button.

Touch on Folder, to browse Sites, Libraries, and folders in SharePoint

The screenshot shows the 'Folder' selection dialog. At the top, there is a title bar 'Folder' and an 'OK' button. Below the title bar, there is a header area with a back arrow, the text '(Unnamed Folder)', and icons for list view, clock, and search. Below this is a navigation bar with '<', '1 / 1', and '>' buttons, along with icons for refresh and repeat. The main area displays a list of six folders in a two-column grid: 'ACT Team Site', 'Team Site', 'Test', 'Saguaro', 'PointPublishing Hub Site', and 'Community'. Each folder name is preceded by a folder icon and followed by a right-pointing chevron.

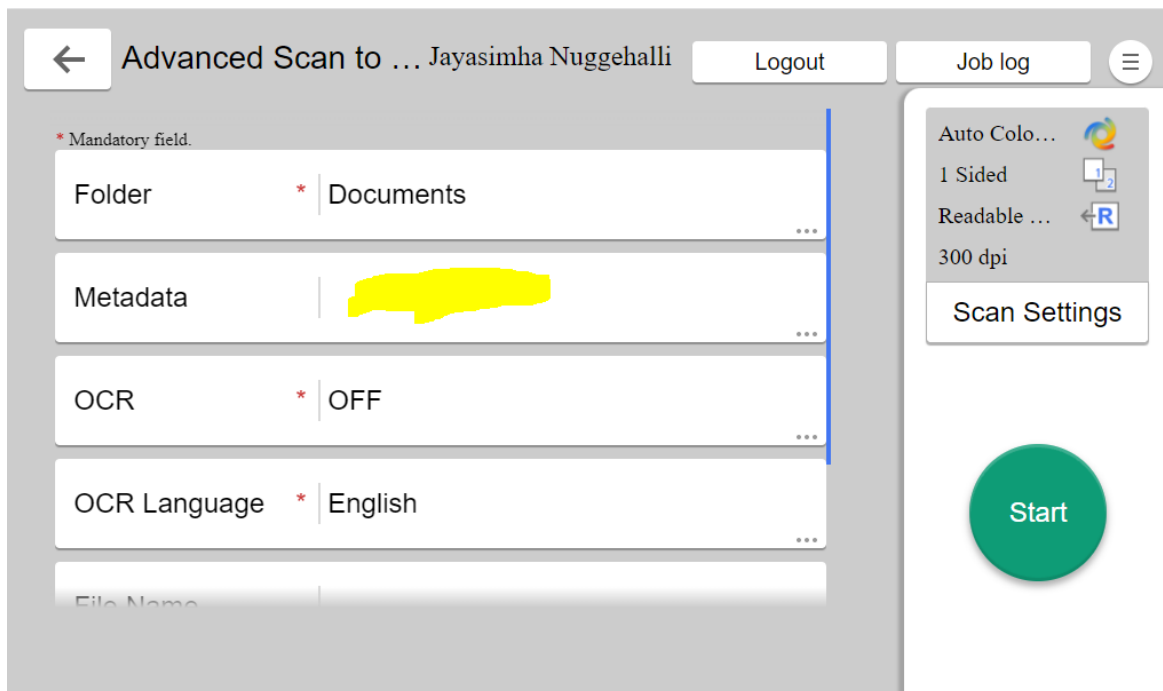
This will display List of Sites. Touch on desired Site to select Library/Folder



Touch on desired folder and touch on 'OK' to select folder

Note: Scan document cannot be uploaded to a Site, but only to library or folder in SharePoint. If user selects a site instead of a folder, 'Start' button will be disabled.

Metadata



Touch on Metadata to open list of Metadata available for the selected folder

Metadata OK

Department	Engineering	...
Document Type	Invoice	...
Date Stamp	2018-06-13	...
Approver		


Set desired values for Metadata fields.


OCR


← Advanced Scan to ... Jayasimha Nuggehalli Logout Job log ☰

* Mandatory field.

Folder	*	Documents	...
Metadata			...
OCR	*	OFF	...
OCR Language	*	English	...
File Name			

Auto Colo... 

1 Sided 

Readable ... 

300 dpi

Scan Settings

Start

Touch on OCR to select available options

OCR

Cancel OK

☒ OFF

☐ PDF

☐ PDF/A

☐ WORD

☐ EXCEL

OCR Language

← Advanced Scan to ... Jayasimha Nuggehalli Logout Job log

* Mandatory field.

Folder * Documents ...

Metadata ...

OCR * OFF ...

OCR Language * English ...

File Name ...

Auto Colo...
1 Sided
Readable ...
300 dpi
Scan Settings

Start

Touch on OCR Language to select available options

OCR Language

Cancel OK

☒ English

☐ French

☐ Spanish

☐ Portuguese Brazilian

Remove Blank Page

← Advanced Scan to ... Jayasimha Nuggehalli Logout Job log

OCR * OFF

OCR Language * English

File Name

Remove Blank Page * OFF

Auto Colo... 1 Sided Readable ... 300 dpi

Scan Settings

Start

Scan Settings

← Advanced Scan to ... Jayasimha Nuggehalli Logout Job log

* Mandatory field.

Folder * Documents ...

Metadata ...

OCR * OFF ...

OCR Language * English ...

File Name ...

Auto Colo...
1 Sided
Readable ...
300 dpi
Scan Settings

Start

Touch on 'Scan Settings' to display Scan Settings Screen

← Scan Settings

Scan Color Mode
Auto Color Select

Original Sides
1 Sided

Document Orientation
Readable Direction

Scan Resolution
300 dpi

Document Size
Auto

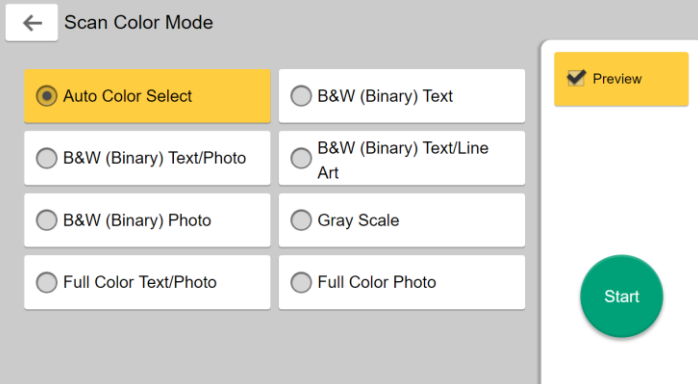
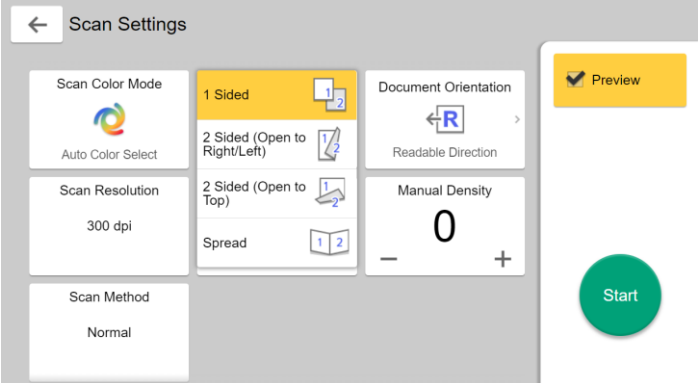
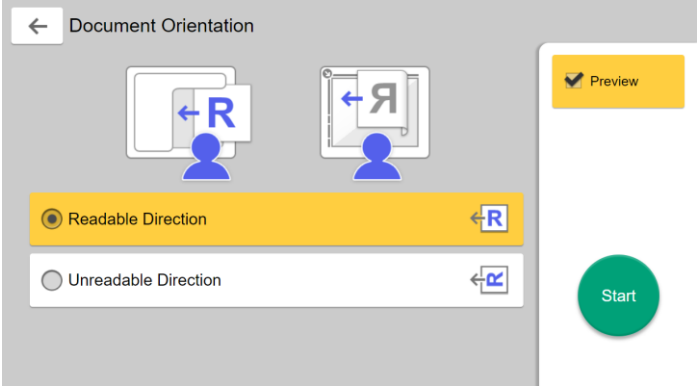
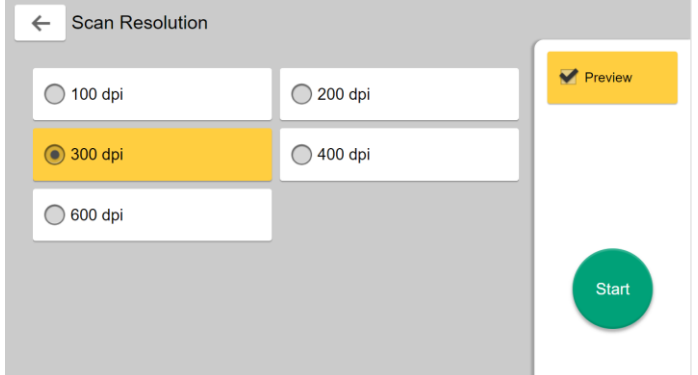
Manual Density
0

Scan Method
Normal

☒ Preview

Start

Checking 'Preview' will enable Scan document Preview on MFP Operation Panel.

Scan Settings	Available Options
Scan Color mode	 <p>← Scan Color Mode</p> <p> <input checked="" type="radio"/> Auto Color Select <input type="radio"/> B&W (Binary) Text </p> <p> <input type="radio"/> B&W (Binary) Text/Photo <input type="radio"/> B&W (Binary) Text/Line Art </p> <p> <input type="radio"/> B&W (Binary) Photo <input type="radio"/> Gray Scale </p> <p> <input type="radio"/> Full Color Text/Photo <input type="radio"/> Full Color Photo </p> <p>Preview</p> <p>Start</p>
Original Sides	 <p>← Scan Settings</p> <p> Scan Color Mode: Auto Color Select </p> <p> Scan Resolution: 300 dpi </p> <p> Scan Method: Normal </p> <p> 1 Sided 2 Sided (Open to Right/Left) 2 Sided (Open to Top) Spread </p> <p> Document Orientation: Readable Direction </p> <p> Manual Density: 0 </p> <p>Preview</p> <p>Start</p>
Document Orientation	 <p>← Document Orientation</p> <p> Readable Direction Unreadable Direction </p> <p>Preview</p> <p>Start</p>
Scan Resolution	 <p>← Scan Resolution</p> <p> <input type="radio"/> 100 dpi <input type="radio"/> 200 dpi </p> <p> <input checked="" type="radio"/> 300 dpi <input type="radio"/> 400 dpi </p> <p> <input type="radio"/> 600 dpi </p> <p>Preview</p> <p>Start</p>

Document size	<div><div><div>← Document Size</div><div><div><input checked="" type="radio"/> Auto</div><div><input type="radio"/> Mixed</div></div><div><div><input type="radio"/> A3 (Horizontal)</div><div><input type="radio"/> JIS B4 (Horizontal)</div></div><div><div><input type="radio"/> A4</div><div><input type="radio"/> A4 (Horizontal)</div></div><div><div><input type="radio"/> JIS B5</div><div><input type="radio"/> JIS B5 (Horizontal)</div></div><div><div><input type="radio"/> A5</div><div><input type="radio"/> A5 (Horizontal)</div></div></div><div><div>✓ Preview</div><div>Start</div></div></div> <div><div>← Document Size</div><div><div><input type="radio"/> A5</div><div><input type="radio"/> A5 (Horizontal)</div></div><div><div><input type="radio"/> 11 x 17 (Horizontal)</div><div><input type="radio"/> Legal (Horizontal)</div></div><div><div><input type="radio"/> 8 1/2 x 13 (Horizontal)</div><div><input type="radio"/> Letter</div></div><div><div><input type="radio"/> Letter (Horizontal)</div><div><input type="radio"/> Invoice (Half Letter Size)</div></div><div><div><input type="radio"/> Invoice (Horizontal)</div></div></div> <div><div>✓ Preview</div><div>Start</div></div>
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6 Limitations

Advanced Scan to SharePoint Limitations

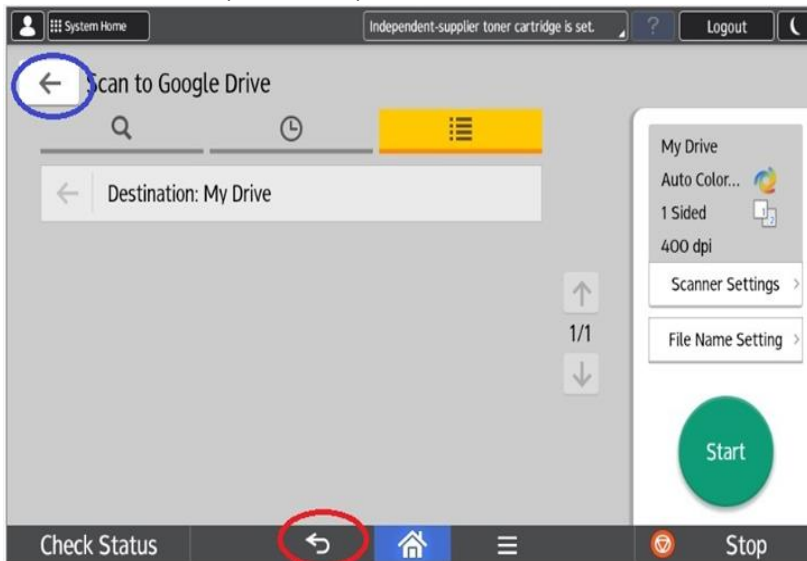
- Only Following Metadata types are supported
 - Single line of text
 - Multiple lines of text
 - Choice
 - Number
 - Currency
 - Date and Time
 - Yes/No
- Only English language is supported for OCR
- When Remove Blank Page is enabled, Maximum Scan file size is limited to 50MB

User Site Limitations

- Supported Browsers for User Site are:
 - Internet Explorer: 11 or later
 - Edge: Latest Version
 - Chrome: Latest Version
 - Firefox: Latest Version
- Limitations for Home Screen/Applications
 - Home: Maximum 20 for each profile, Max 32 characters for the name.
 - Applications: Maximum 18 for each home screen, Max 32 characters for the name
- User Management
 - Email address is unique in the system; same Email address cannot be used even if user belongs to different Tenants
 - Users belong to same tenant cannot set different time zones
 - User cannot change their login Email address, need admins assistance to change email address

General Limitations

- Once Administrator has logged in to a Tenant on MFP, administrator from another tenant cannot login to same MFP. Refer to guide on 'How to remove registered device'
- Back button inside application display screen must be used, instead for 'Back' button on the operation panel.



- Folder and File Search results varies from Cloud Service to Cloud Service, this depends on the Search API for each service.

OCR Limitations

Category	Phenomenon	Description
Upside-down image rotation	Sometimes misrecognized	We identify the top and bottom from the image as pre-processing of OCR. We use information such as the direction of arrangement of letters, letter / picture / chart layout, ruled line position, etc. to infer which is upper. In the case of the following manuscripts, the OCR may also fail because the top / bottom discrimination fails. <ul style="list-style-type: none"> · Manuscript with only few letters · Manuscript with characters written diagonally · Documents with a dark background / background such as photos
OCR	Unusual fonts cannot be recognized	In OCR, it is based on standardly used fonts such as Arial / Verdana / Times New Roman for foreign languages, MS Ming Dynasty / MS Gothic / MS UI Gothic for Japanese. Therefore, recognition may fail in the following cases. <ul style="list-style-type: none"> · Using a special font · Using extremely large / small font size
	Input image is not clear	Although 200 dpi to 600 dpi is recommended for engine specifications, if the recognition rate is bad at 200 dpi, please raise the resolution and scan again. Also, if the input images are blurred or are not enough contrast, the recognition rate will not improve. Please use clear images.
PDF output	Output size is different	Due to the limitation of the current engine, the size of the output PDF page may

		increase by about 0.3 to 1.7 mm.
	Sometimes impossible to print with EXP machine	When you print PDF with Japanese OCR by EXP machine, if alternative font is not installed in MFP, it may not be printed correctly.
Word output	Layout collapse	The OCR engine writes the character string of the recognition result as Word text and uses the font size / font type / line spacing / text width etc. to try to make it as close to the original as possible, but it is difficult to match with the original perfectly. Therefore, the following phenomena may occur. <ul style="list-style-type: none"> Although the manuscript was 2 pages, it became 3 pages / 1 page Margins increase or decrease
	The number of blank pages increases	If you input multiple pages and try to output them in Word, blank pages sometimes increase.
	Sometimes the footer's page number is incorrect	When outputting a document with a page number in the footer section as an input, Word automatically counts the page count and may be out of alignment with the page number of the document. Example: Manuscript: 2 pages of 3/8, 4/8 Word output result: 2 pages of 1/2, 2/2 (Since there are only 2 pages, Word automatically judges 2 pages, 8 replaces 2 and redoes the page)
	Doc format, that is created by OCR, cannot be displayed in iOS UIWebView	It is said that iOS does not officially support doc / xls etc., it may not be displayed normally on iOS machines. This is because the OCR function creates data in RTF format and then outputs it to

		doc format. Please use docx / xlsx.
	Sometimes blank page is removed	In decision of the current OCR engine, blank page is sometimes removed. So, for example, 4 pages sometimes become 3 pages.
	Cell color/ Frame border are lost	For Word output, the color of the cell or the frame border of the table are lost during the transfer.
Excel output	Color / figure / photo are lost	For Excel output, the color of characters is not reflected. Also, figures and photographs are not reflected. With regard to the part recognized as table, OCR engine uses the cell ruled line / cell combination to create table.

7 Appendix

File Name Formula

Formula functions are similar to Microsoft Excel Formulas. Not all Excel functions are relevant and supported.

Following variables from the workflow application are available to use in the formula

1. TenantId [Smart Integration Tenant ID]
2. UserId [Smart Integration User ID]
3. Metadata1
4. Metadata2
5. Metadata3
6. Metadata4
7. Metadata5

Sample Formulas

Formula	Result
YEAR(NOW()) & "-" & MONTH(NOW()) & "-" & DAY(NOW()) & "-" & HOUR(NOW()) & MINUTE(NOW()) & SECOND(NOW())	2018-12-21-102657
YEAR(NOW()) & "-INVOICE"	2018-INVOICE
_[UserId] & "-" & YEAR(NOW()) & "-" & MONTH(NOW()) & "-" & DAY(NOW())	TOM-2018-12-21
_[Metadata1] & "-" & MONTH(NOW()) & DAY(NOW()) & YEAR(NOW()) & "-" & HOUR(NOW()) & MINUTE(NOW()) & SECOND(NOW())	DOC-142019-192311

How to Validate the Formula

Use the 'Check' button next File Name Formula to Validate the Syntax

Formula Functions

Formula Evaluation is based on Open Source, Apache POI

Note: Please see link below. All formulas listed may not be relevant to workflow application. Here is list of formulas.

<http://poi.apache.org/components/spreadsheet/eval-devguide.html>