

File Splitter



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1 Preface

This guide provides the details on how to use the workflow File Splitter.

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 Connection

This section describes how to service connection with external cloud Services like Box, Dropbox, Google Drive, OneDrive for Business, SharePoint Online

3. Configuring Dictionary and Default Values

This section contains step-by-step instructions on how to configure settings related to File Splitter application in Smart Integration Portal.

4. Operation of File Splitter Application

This section contains step-by-step instructions on how to operate File Splitter 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 File Splitter workflow?

File Splitter is a workflow application developed on Ricoh Smart Integration Platform.

This workflow enables users to Scan stack of document and split them into multiple files based on user settings on the operation panel. Files are uploaded to the cloud destination. File is named based on File Name formula configured by default; however, user can enter the filename of their choice. Split files are named as follows.

xyz, xyz(1), xyz(2), xyz(n-1), where 'xyz' is value generated by File Name Formula or file name set by user on operation panel.

Workflow Specification

Folder	Root folder selection
Sub Folder	Sub Folder Optional Field, if the Sub Folder does not exist it will be created.
Division Method	<ul style="list-style-type: none"> • Each Pages • Specified Pages • Pages Equally
Start Page Index	Available when 'Specified Pages' are selected, comma separated page numbers to set division based on specified pages
Divide By	Number of Pages to be divided equally. Example: 2 Document is divided by every two pages
OCR	Off, PDF, PDFA, WORD, EXCEL Default: Off
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>MONTH(NOW()) & DAY(NOW()) & YEAR(NOW()) & "-" & HOUR(NOW()) & MINUTE(NOW()) & SECOND(NOW())</p> <p>Example:</p> <p>6212021-16561</p>

- A. Default values can be configured for Scan settings, OCR, Date format and Division Method.
- B. Sub Folder field can be hidden from the Operation Panel User Interface.

3 Cloud Service Connection

What is Cloud Service Connection?

Before using File Splitter workflow, user need to establish connection (authentication) with Cloud service of choice. As of now following Cloud Services are supported.

1. Box
2. Dropbox
3. Google
4. OneDrive for Business [Office 365]
5. SharePoint online

For each Cloud Service there is a separate File Splitter application available On MFP Operation Panel.

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

4 Configuring Dictionary and default Values

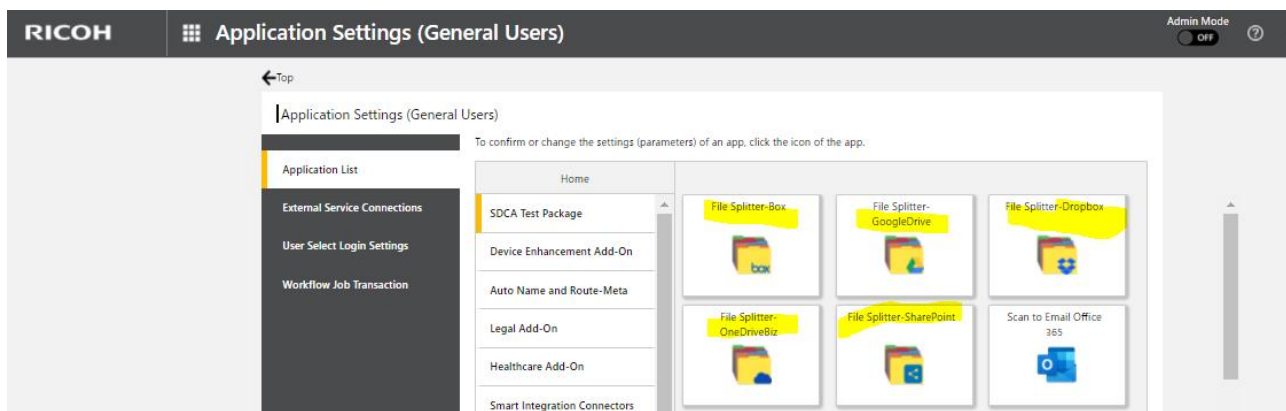
Smart Integration Portal URL

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

Login to above site using your credentials.



Click on 'Application Settings'



Click on 'File Splitter'. This will display a page where all necessary parameters can be configured.

← Application List

File Splitter-Box

* Mandatory field

Cancel Save

Service Settings

Service: Box

Folder: All Files

[Open External Service Connections](#)

Common Settings

Default Screen for Folder Browsing:

Default Layout for Folder Browse:

Default Parameter Settings

File Name Formula:

Sub Folder:

☐ Hide in application

Division Method:

Divide By:

OCR:

OCR Language:

Start Page Index

Start Page Index:

Dictionary Label:

Dictionary Delimiter:

Label	Value
Every 2	3,5,7,9,11,13,15,17,19,21,23,25,27,2
Every 3	4,7,10,13,16,19,22,25,27,30,33,36,3
Every 5	6,11,16,21,26,31,36,41,46,51,56,61,

Dictionary Column Width:

File Name

File Name:

Dictionary Label:

Dictionary Delimiter:

Above settings are available to configure.

Selecting Default Root folder

File Splitter-Box

Cancel Save

Mandatory field

Service Settings

Service

Box

Folder *

Select Folder

All Files

[Open External Service Connections](#)

Common Settings

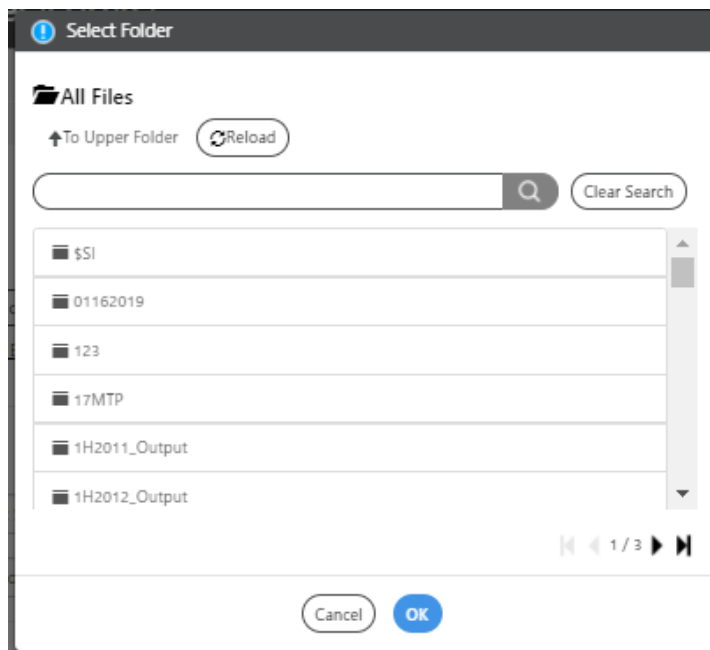
Default Screen for Folder Browsing

List Screen

Default Layout for Folder Browse

2 Rows

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



Select required folder and click 'OK'.

Sub Folder

Sub Folder

☐ Hide in application

User can enter a Sub Folder name, if the folder does not exist, it will be created under the root folder selected above. These settings can be hidden in operation panel, by checking 'Hide in application'

Start Page Index

Start Page Index

Start Page Index: 1,

Dictionary Label:

Dictionary Delimiter:

Import Dictionary

Label	Value
Every 2	3,5,7,9,11,13,15,17,19,21,23,25,27,29
Every 3	4,7,10,13,16,19,22,25,27,30,33,36,39,
Every 5	6,11,16,21,26,31,36,41,46,51,56,61,66
Every 10	11,21,31,41,51,61,71,81,91,101

Dictionary Column Width: Standard

Dictionary can be setup to easily select values for 'Specified Pages' selection of File Split parameters.

Divide By

Division Method: Pages Equally

Divide By: 2

When Division Method is set o 'Page Equally' depending on the value in 'Divide By' document gets split.

Example: Divide By = 2

Document is split every two pages.

OCR

Default value for OCR can be configured.

OCR: OFF

OCR Language: PDF, PDF/A, WORD, EXCEL

Setting up Default File Name & File Name Key Words

File Name

File Name

Dictionary Label

Dictionary Delimiter

Import Dictionary

Dictionary	Value
TimeCard	
Invoice	
PO	

Dictionary Column Width

Enter Required Filename Default Value and also can setup dictionary of Keywords which can be used in the filename. A delimiter/separator can also be configured, if multiple keywords are used for naming the file.

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.

File Name Formula *

6212021-172248

Default Formula:

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

Use the 'Check' button to verify Syntax of the formula.

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

Scan Settings

Default Scan settings can be configured here

Default Scan Settings

Scan Color Mode

Original Sides

Document Orientation

Scan Resolution

Document Size

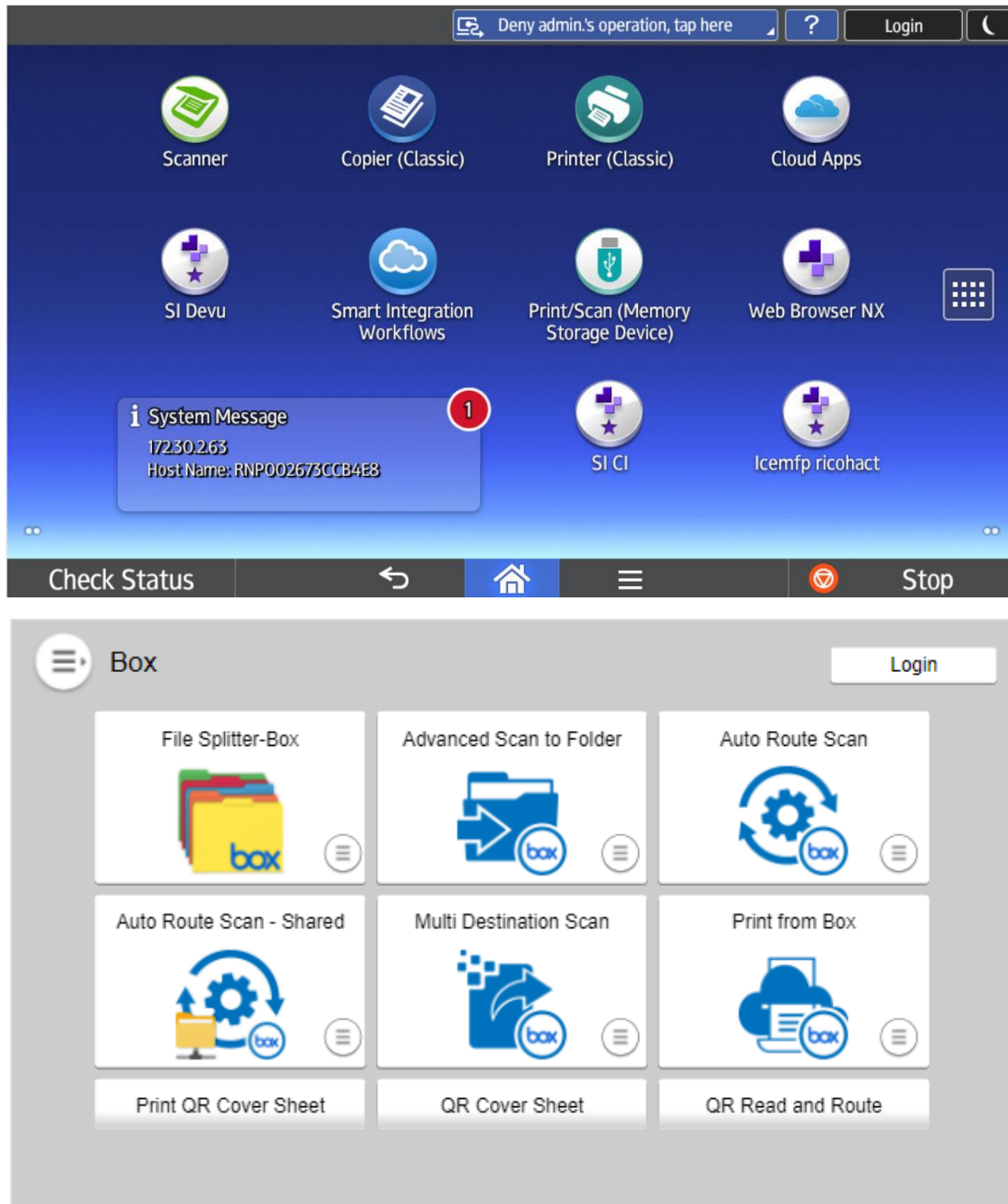
Manual Density

Scan Method

Preview

5 Operation of File Splitter Workflow Application

Touch on 'Smart Integration Workflows' to access File Splitter Workflow



Above screen shows workflow application related to Box Cloud service.

Select 'File Splitter' application

End User is requested to Login. Press 'Login' Button to Login. Use your credentials to login.

After successful user login 'File Splitter' Application Screen is displayed

Following Settings are available:

- A. Folder
- B. Sub folder
- C. Division Method
- D. Start Page Index
- E. Divide By
- F. OCR [Off, PDF, PDFA, WORD, EXCEL]
- G. OCR Language [English, French]
- H. File Name

The screenshot shows the 'File Splitter-Box' application window. The header includes a back arrow, the title 'File Splitter-Box', the user name 'Jayasimha Nuggehalli', a 'Logout' button, and a 'Job log' button with a menu icon. The main area contains several input fields: 'Folder' with a red asterisk and the value 'All Files', 'Sub Folder' (empty), 'Division Method' with a red asterisk and the value 'Each Pages', 'Start Page Index' with the value '1', and 'Divide By' with the value '2'. A 'Scan Settings' button is located on the right side of the main area. A large green circular 'Start' button is positioned below the 'Scan Settings' button.

The screenshot shows the 'File Splitter-Box' application window with the same header as the previous screenshot. The main area contains the following input fields: 'Start Page Index' with the value '1', 'Divide By' with the value '2', 'OCR' with a red asterisk and the value 'OFF', 'OCR Language' with a red asterisk and the value 'English', and 'File Name' (empty). A 'Scan Settings' button is located on the right side of the main area. A large green circular 'Start' button is positioned below the 'Scan Settings' button.

Folder

File Splitter-Box Jayasimha Nuggehalli Logout Job log

* Mandatory field

Folder **All Files**

Sub Folder

Division Method **Each Pages**

Start Page Index 1

Divide By 2

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

Scan Settings

Start

Touch on Folder to browse and select desired folder.

Folder Cancel OK

All Files

1 / 32

\$SI	>	01162019	>
123	>	17MTP	>
1H2011_Output	>	1H2012_Output	>
1H2014 Output	>	1H2017 Deliverables	>

Sub Folder

The screenshot shows the 'File Splitter-Box' interface. At the top, there is a header bar with a back arrow, the title 'File Splitter-Box', the user name 'Jayasimha Nugehalli', and buttons for 'Logout' and 'Job log'. Below the header, there is a list of input fields. The 'Folder' field is set to 'All Files'. The 'Sub Folder' field is highlighted in yellow. The 'Division Method' field is set to 'Each Pages'. The 'Start Page Index' field is set to '1,'. The 'Divide By' field is set to '2'. On the right side, there is a 'Scan Settings' panel with options for 'Auto Colo...', '1 Sided', 'Readable ...', and '300 dpi'. A large green 'Start' button is located at the bottom right.

Division Method

The screenshot shows the 'File Splitter-Box' interface. At the top, there is a header bar with a back arrow, the title 'File Splitter-Box', the user name 'Jayasimha Nugehalli', and buttons for 'Logout' and 'Job log'. Below the header, there is a list of input fields. The 'Folder' field is set to 'All Files'. The 'Sub Folder' field is empty. The 'Division Method' field is highlighted in yellow. The 'Start Page Index' field is set to '1,'. The 'Divide By' field is set to '2'. On the right side, there is a 'Scan Settings' panel with options for 'Auto Colo...', '1 Sided', 'Readable ...', and '300 dpi'. A large green 'Start' button is located at the bottom right.

Touch on Division Method to select 'Division Method'.

Division Method

Cancel OK

☒ Each Pages

☐ Specified Pages

☐ Pages Equally

Start Page Index

File Splitter-Box Jayasimha Nuggehalli Logout Job log

* Mandatory field

Folder * All Files

Sub Folder

Division Method * Specified Pages

Start Page Index 1,

Scan Settings

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

Start

Specification Details

Specifies the start page to split. (Valid only when the division method is Specified Pages) If you specify a positive integer of half-width numbers, a value larger than the PDF of the valid input only with a comma (,), or 0, it is ignored.

Duplicate values are ignored, and the entered values are sorted internally in ascending order for processing. If there is an empty string between commas, it is ignored. If only commas or 0 are specified, the same processing as when the default value is set is performed.

Default value: 1,

Example: If you enter an 8-page PDF and specify "0,3,7,10", 0 and 10 will be ignored and the PDF will be divided into 1-2 pages, 3-6 pages, and 7-8 pages. Is output.

Touching on 'Start Page Index' will open the following screen, where user can enter page numbers to be split or use pre-programmed values in dictionary.

Start Page Index

Cancel OK

1,

Dictionary

Every 2 Every 3

Every 5 Every 10

Divide By

When Division Method is set o 'Page Equally' depending on the value in 'Divide By' document gets split.

Example: Divide By = 2

Document is split every two pages.

The screenshot shows a web application interface titled "File Splitter-Box". At the top, there is a navigation bar with a back arrow, the title "File Splitter-Box", the user name "Jayasimha Nuggehalli", a "Logout" button, and a "Job log" button. Below the navigation bar, the main settings area contains several input fields: "Sub Folder" (empty), "Division Method" (set to "Pages Equally", highlighted in yellow), "Start Page Index" (set to "1,"), "Divide By" (set to "2", highlighted in yellow), and "OCR" (set to "OFF"). To the right of these settings is a "Scan Settings" panel with options: "Auto Colo..." (with a color wheel icon), "1 Sided" (with a document icon), "Readable ..." (with a document icon and a red 'R' in a blue box), and "300 dpi". Below the "Scan Settings" panel is a large green circular button labeled "Start".

OCR

The screenshot shows the 'File Splitter-Box' interface. At the top, there is a header bar with a back arrow, the title 'File Splitter-Box', the user name 'Jayasimha Nuggehalli', and buttons for 'Logout' and 'Job log'. Below the header, there are several input fields: a text field for 'Start Page Index' with the value '1', a dropdown menu for 'OCR' currently set to 'OFF', a dropdown menu for 'OCR Language' set to 'English', and a text field for 'File Name'. On the right side, there is a 'Scan Settings' panel with options for 'Auto Color', '1 Sided', 'Readable ...', and '300 dpi'. A large green circular button labeled 'Start' is positioned below the 'Scan Settings' panel.

Touch on OCR to select available options.

The screenshot shows a dialog box titled 'OCR'. It has a 'Cancel' button and an 'OK' button. Inside the dialog, there are five radio button options: 'OFF' (which is selected and highlighted in yellow), 'PDF', 'PDFA', 'WORD', and 'EXCEL'.

OCR Language

The screenshot shows the 'File Splitter-Box' interface. At the top, there is a header bar with a back arrow, the title 'File Splitter-Box', the user name 'Jayasimha Nuggehalli', a 'Logout' button, a 'Job log' button, and a menu icon. Below the header, there are several input fields: a text field for 'Start Page Index' with the value '1,', an 'OCR' toggle switch set to 'OFF', an 'OCR Language' dropdown menu set to 'English', and a 'File Name' text field. On the right side, there is a 'Scan Settings' panel with options for 'Auto Colo...', '1 Sided', 'Readable ...', and '300 dpi'. A large green circular 'Start' button is located at the bottom right of the interface.

Touch on OCR Language to Select available options.

The screenshot shows the 'OCR Language' selection dialog. It has a title bar with 'OCR Language' and two buttons: 'Cancel' and 'OK'. The dialog contains two radio button options: 'English' (which is selected and highlighted with a yellow background) and 'French'.

File Name

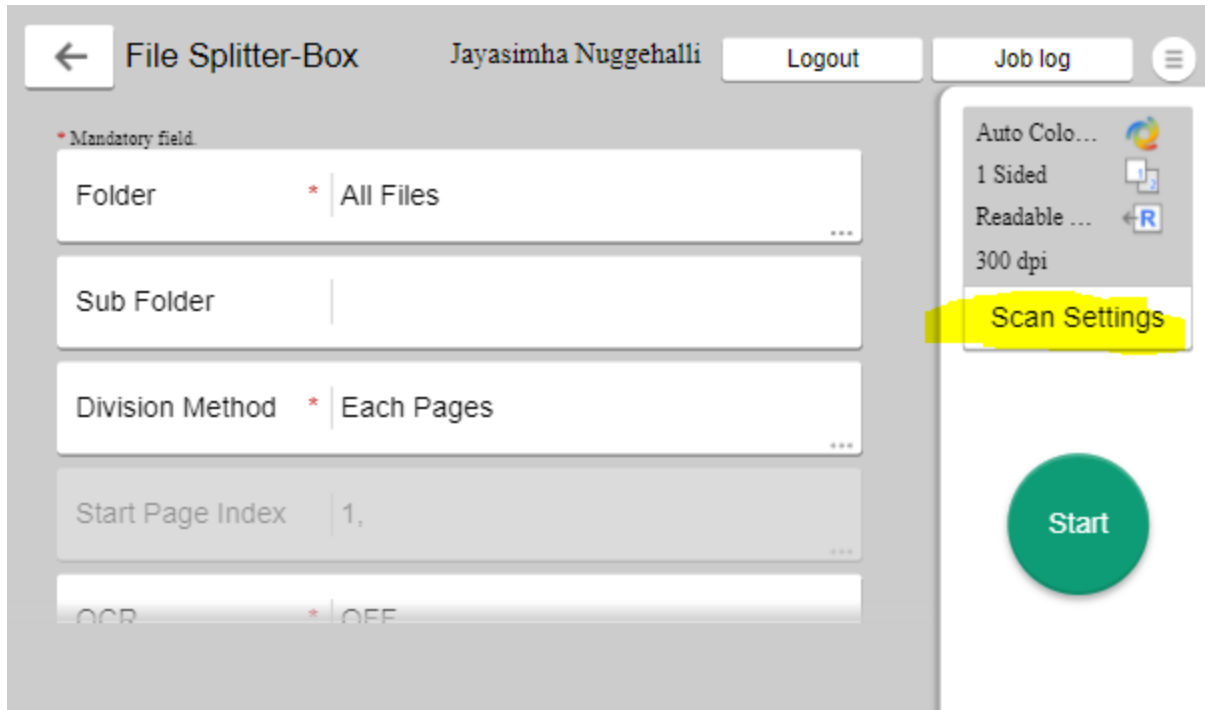
If filename field is empty below filename formula is used to create filename, otherwise user entered filename is created.

Touch on File Name field to enter filename or select from configured dictionary as shown below.

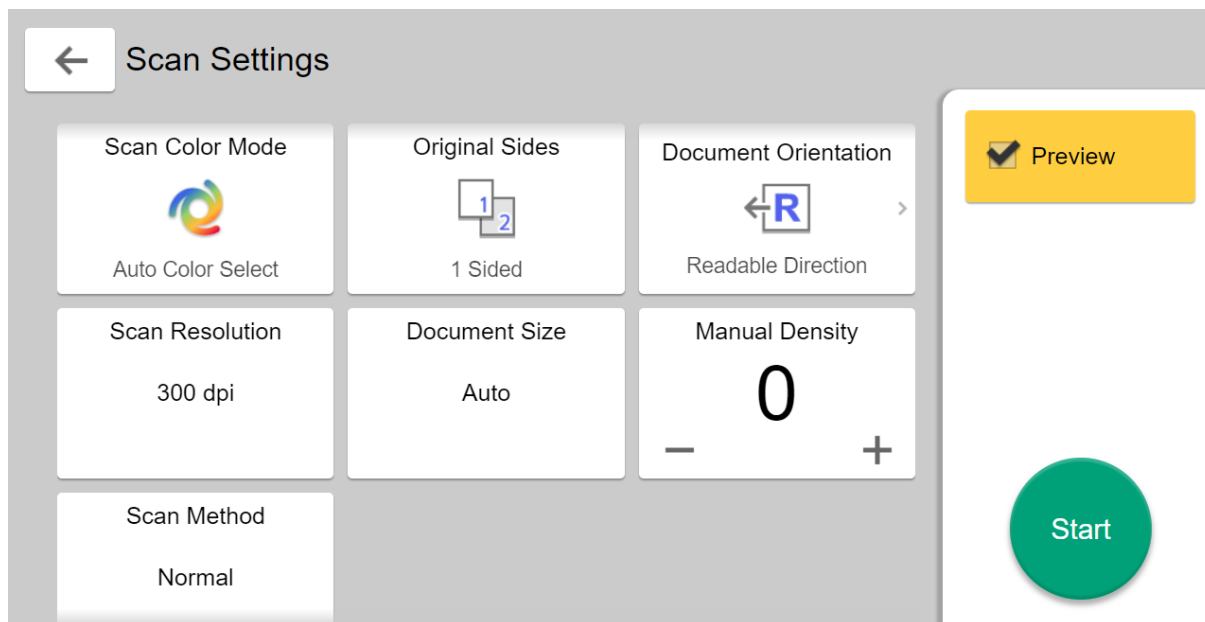
The screenshot shows the 'File Splitter-Box' interface. At the top, there is a header bar with a back arrow, the title 'File Splitter-Box', the user name 'Jayasimha Nuggehalli', and buttons for 'Logout' and 'Job log'. Below the header, there are several input fields: a top empty field, 'Start Page Index' with the value '1,', 'OCR' set to 'OFF', 'OCR Language' set to 'English', and 'File Name' which is currently redacted with a yellow box. To the right of these fields is a 'Scan Settings' panel containing options for 'Auto Colo...', '1 Sided', 'Readable ...', and '300 dpi', along with a 'Start' button.

The screenshot shows a 'File Name' dialog box. It has a title bar with 'File Name' and buttons for 'Cancel' and 'OK'. Inside the dialog, there is a large text input field at the top. Below it, under the heading 'Dictionary', there are three buttons: 'TimeCard', 'Invoice', and 'PO'.

Scan Settings



Touch on 'Scan Settings' to display Scan Settings Screen



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

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

Document size	<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>
---------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

← Document Size

☐ A5

☐ A5 (Horizontal)

☐ 11 x 17 (Horizontal)

☐ Legal (Horizontal)

☐ 8 1/2 x 13 (Horizontal)

☐ Letter

☐ Letter (Horizontal)

☐ Invoice (Half Letter Size)

☐ Invoice (Horizontal)

✓ Preview

Start

6 Limitations

File Splitter Limitations

- Maximum Scan file Size: 50MB
- Maximum number of Pages supported is 500

Smart Integration Portal Site Limitations

- Supported Browsers for User Site are:
 - Internet Explorer: 11 or later
 - Edge: Latest Version
 - Chrome: Latest Version
 - Firefox: Latest Version
- 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'
- Folder and File Search results varies from Cloud Service to Cloud Service, this depends on the Search API for each service.

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]

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

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>

