
Multi LABELIST V5
Training Manual
- Various Printing Methods -

Version 11

SATO CORPORATION

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1: File Printing

Multi LABELIST V5 has many convenient printing functions.
Let's practice how to set up these functions for printing.

1. What Is File Printing?

File printing is a function to prepare the data to be printed in advance as a file and to print them by importing the file data without inputting the required data in the input item when printing the layout.
*File format supports both fixed length and variable length (separation characters can be set arbitrarily).

2. File Format Settings

Create a layout in advance as shown below.

```

    ????  Employe
    ?????????????????????? Depart
    ??????????????????????
    
```

Printer model

Paper size **Employee No.**

Input variab... **Department name**

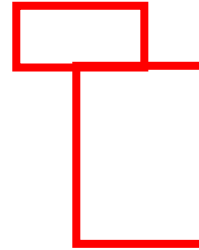
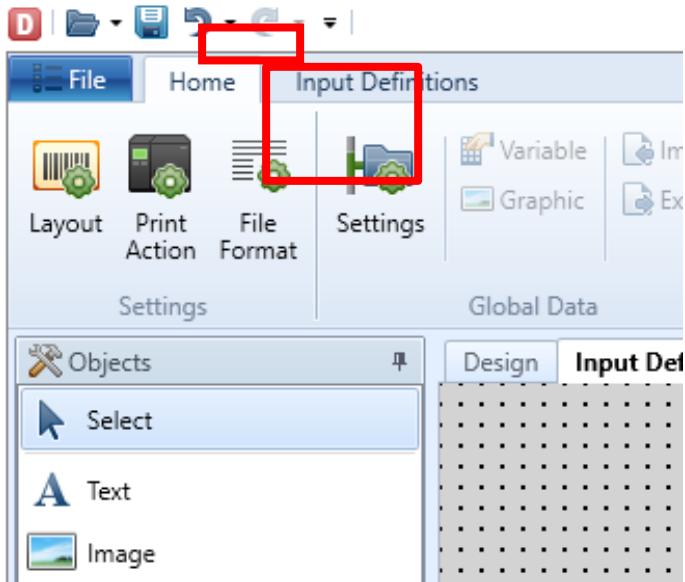
Layout name **Name**

Display the "Input Definitions" screen, move the input item from the header section to the row section, and arrange them in the order shown below.

No.	Employee No.	Name	Department name	Print quantity
1	XXXX	XXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXX	XXXXXX
2	1	2	3	4

Then set the file information to be imported.

On the Input Definitions screen in MLDesign, click “File Format” on the “Home” tab, and the screen shown below is displayed.



File Format Settings

Set the file format.

(1) File name:

(2) Type: Variable length Set automatically (3)

File format image:

Header area	First row of Row area	Second row of row area	...	Row n of Row area	CR/LF
0item(s)	1item(s)				

(4) File format

File format: Comma-separated (*.csv)

Do not load the data on the first row of the file

Quotation character

Quotation character: Delete

Advanced settings

No. of items in Header area: item(s) Auto setting: 0 item(s)

No. of items per row of the Row area: item(s) Auto setting: 1 item(s)

No. of rows in Row area: Row Auto setting: 1 Row

Import until end

Field Definition...

When changing the advanced settings, be careful to ensure the consistency of the file format and input items.

OK Cancel

(1) File name

Click the Browse button and select the file to be imported.

(2) Variable length/Fixed length

Select either “Fixed length” or “Variable length”, depending on the file format to be imported.

(3) Mode

Enable or disable “Set automatically”. For advanced settings, disable the setting.

(4) Advanced settings for type

For Variable length, “File format” and “Quotation character”,
for Fixed length, “No. of record digits” and “Character code” can be set.

*** If “Set automatically” (3) is enabled, the items displayed in gray cannot be set.
If you wish to make your own settings, disable “Set automatically”.**

3. Access from File

Let's import a file on the Print screen in MLPrint.

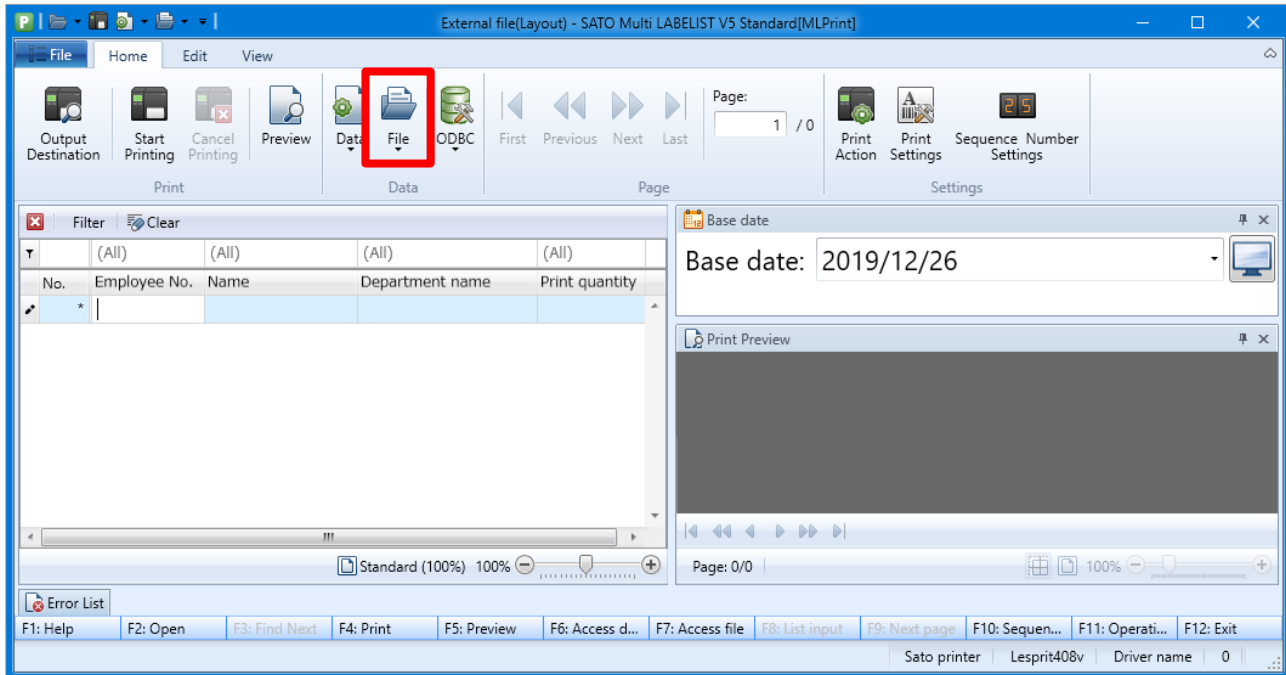
In this section, describe the procedures using a CSV file shown below.



■ File Format Setting values

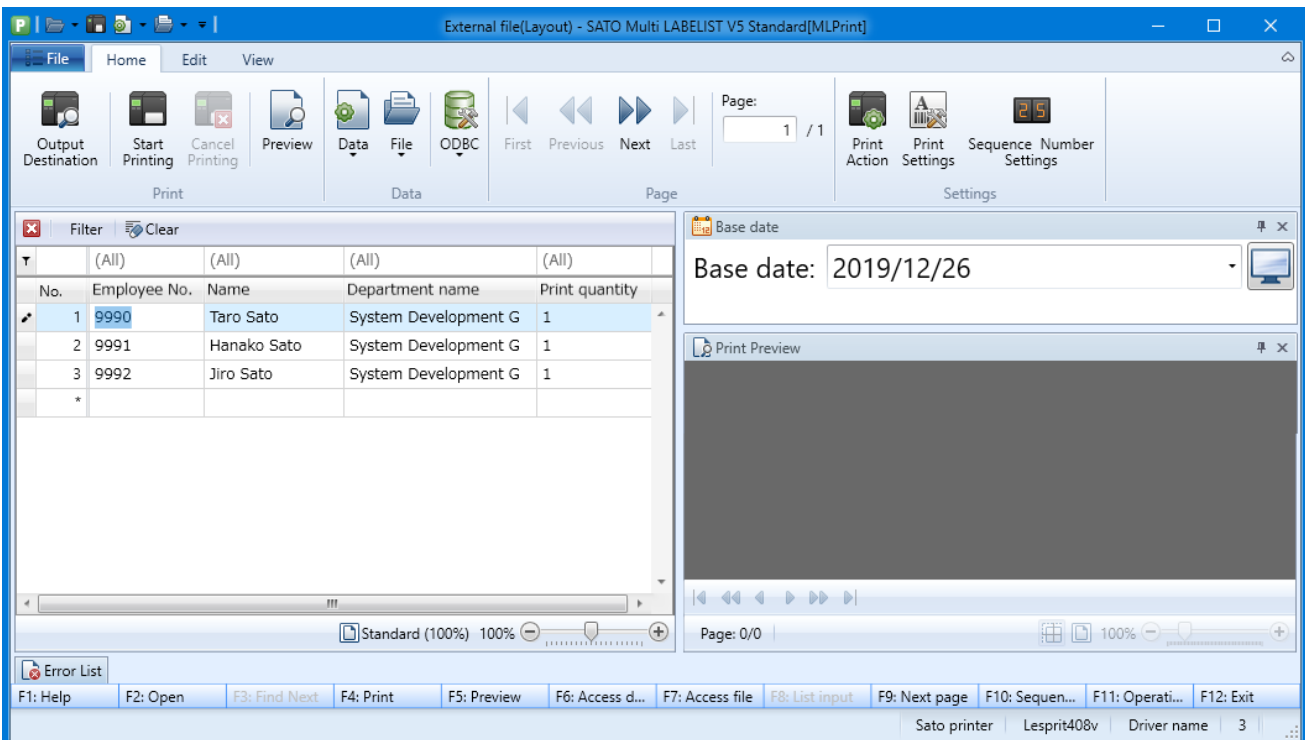
- (1) File name : (full path name) + Staff data.csv
- (2) Variable length/Fixed length : Variable length
- (3) Mode : Set automatically
- (4) Advanced settings for (3) : Comma-separated (.csv)

Start the MLPrint screen and click “File”.



Up to now, each item had to be entered manually...

Now the data saved in the Staff data.csv file can be imported based on the File Format Settings.



The File Print Function can import the data. To print the data, click the Print button.
To print automatically, refer to “[3: Auto Print](#)”.

This completes “[1: File Print](#)”.

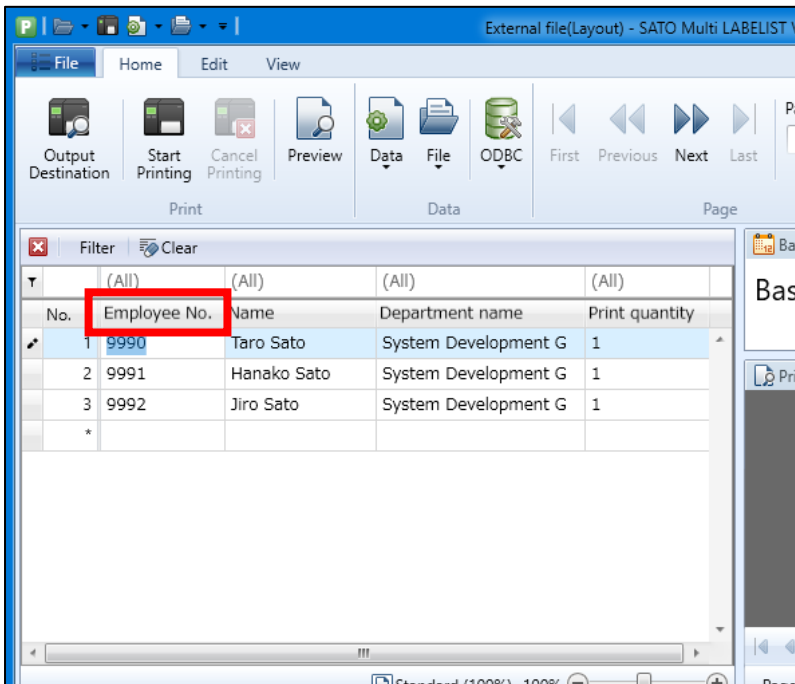
Useful Functions

1. Filter Function

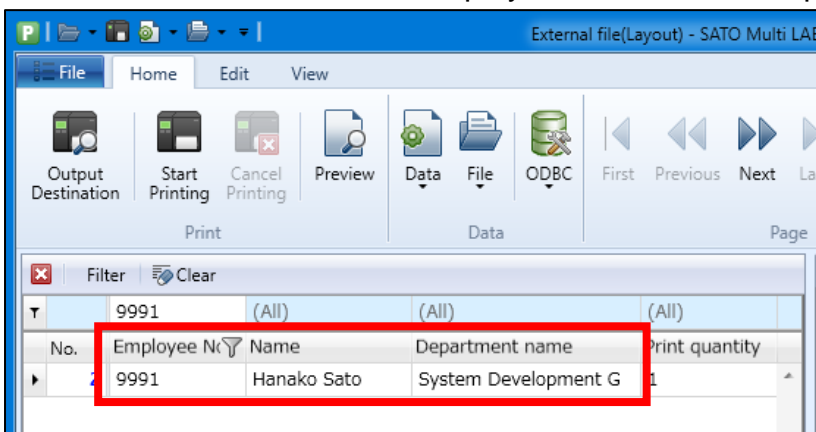
To print the data narrowed down by conditions, use the filter function described below.

Using the data entered for “Employee No.” as a search key, a search is performed for the data to be printed.

Enter the value for searching at the top of each item.



Data are narrowed down and displayed that match the input value in front.



A wildcard can be specified only at the top.

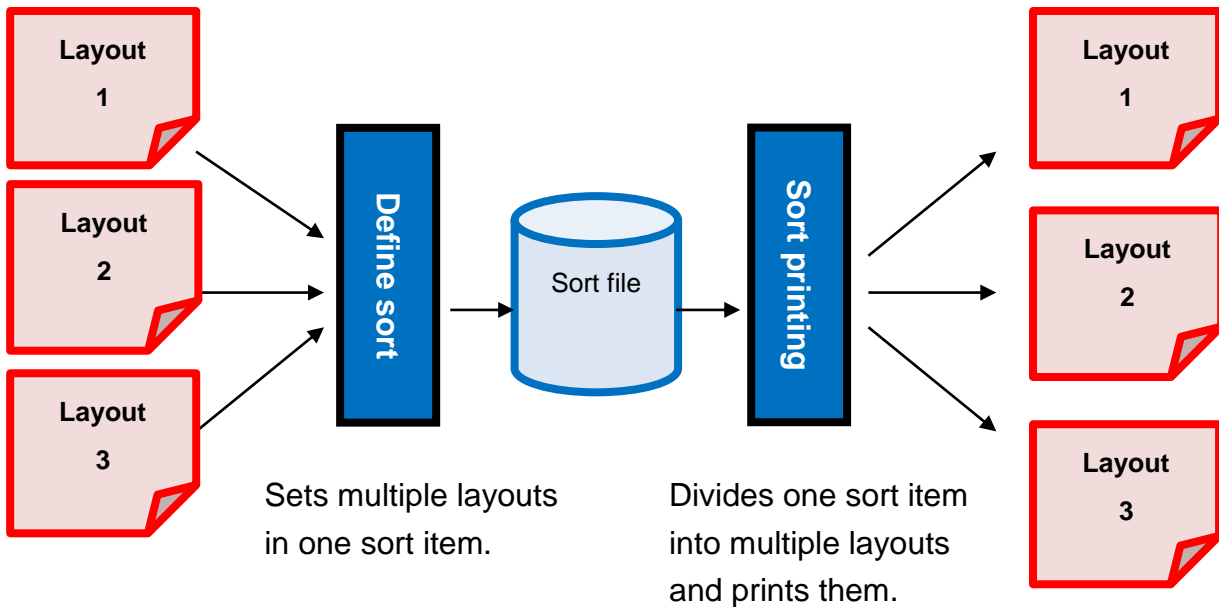
“%” or “_”: Character strings of one or more characters

For example, entering “%310” or “_310” enables the system to filter data that partially include “310” (partial match).

2: Sort Printing

1. What is Sort Printing?

Sort printing is a function to print multiple layouts on a single print screen by sorting them automatically. To set this function, use “Define sort” in “MLSort”.




■ Preparations

Create two layouts as shown below, remembering the practice up to now.

Printer model : CL4NX-J 08
 Paper : 45 mm x 70 mm (Length x Width)
 Layout name : Sort1.mllayx

Design screen

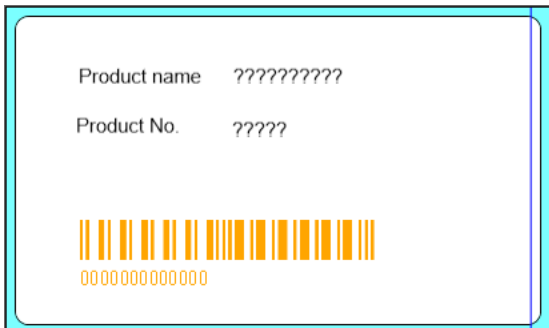
Product name	??????????
Product No.	?????
Lot No.	??????????
 00000000000000	

Variables screen

Variable name	Type	No. of digits	Details
Product name	Input	10	Input type: Character
Product No.	Input	5	Input type: Character
Lot No.	Input	10	Input type: Character
Barcode	Join	15	Remove specified c...
Product No.	Input	5	Input type: Character
Lot No.	Input	10	Input type: Character

Printer model : CL4NX-J 08
 Paper : 45 mm x 70 mm (Length x Width)
 Layout name : Sort2.mllayx

Design screen



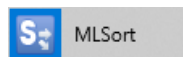
Variables screen

Variable name	Type	No. of digits	Details
Product name	Input	10	Input type: Character
Product No.	Input	5	Input type: Character
Barcode	Join	15	Remove specified c...
Product name	Input	10	Input type: Character
Product No.	Input	5	Input type: Character

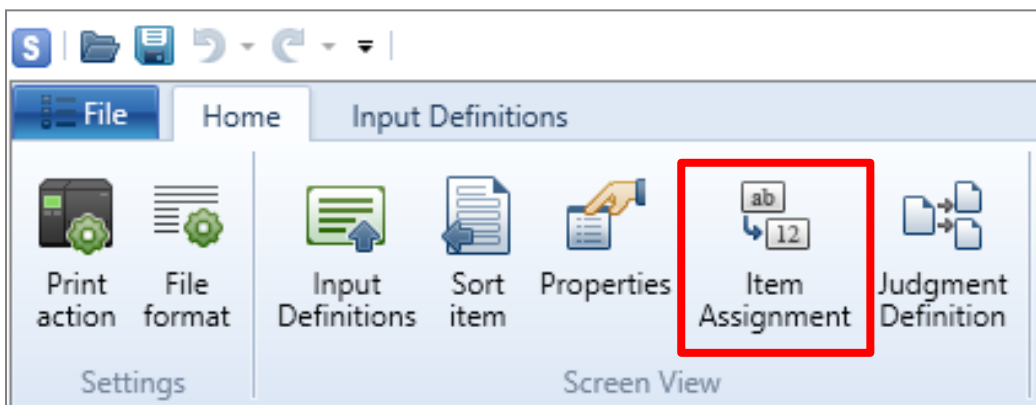
Could you make the layouts?
 Then set the define sort.

2. Setting the Define Sort and Input Assignment

Select Windows Start Menu > All Programs > Multi LABELIST V5

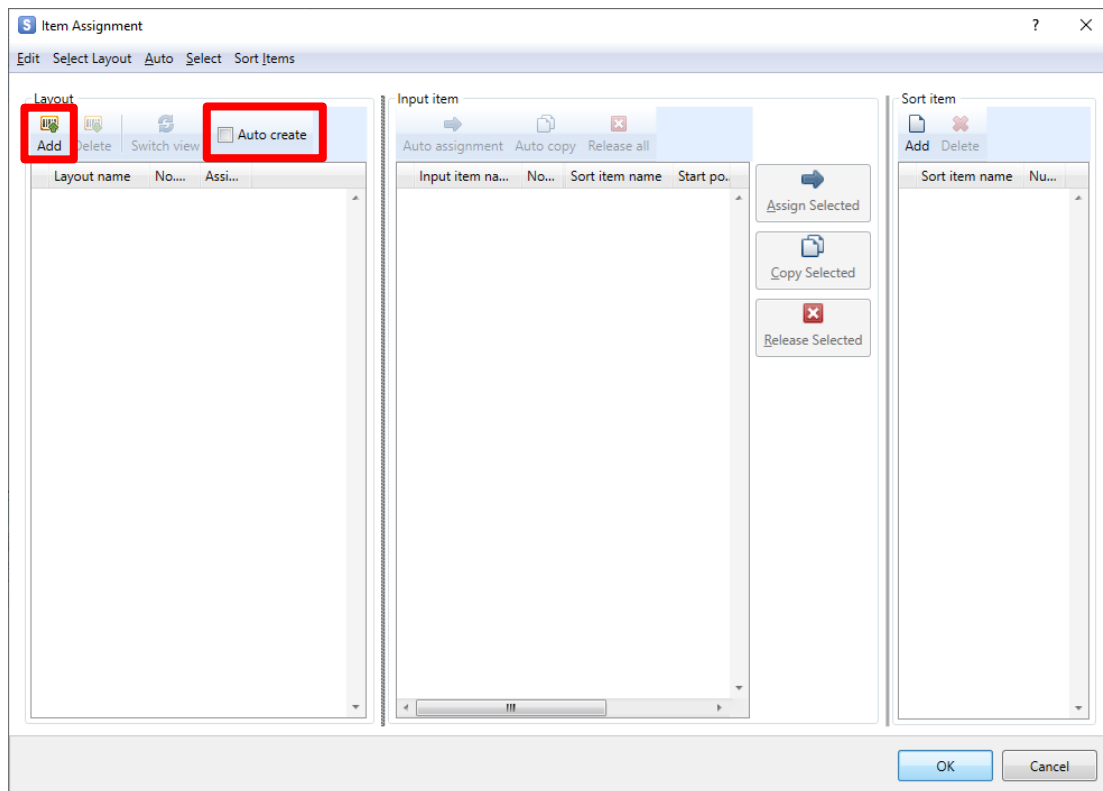


Click the "Item Assignment" button.

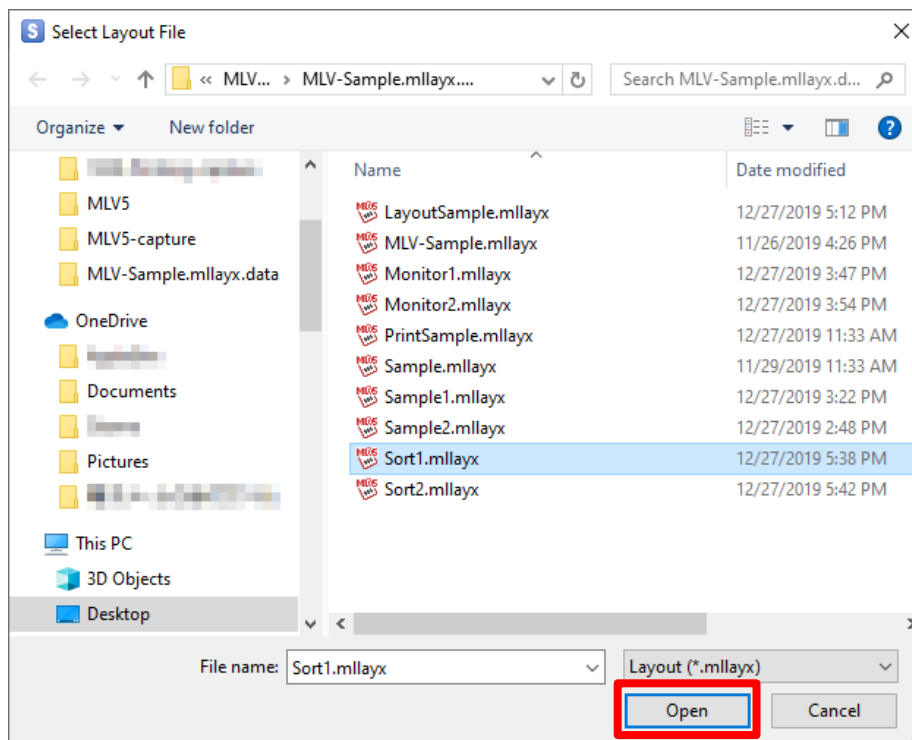


The “Item Assignment” screen is displayed.

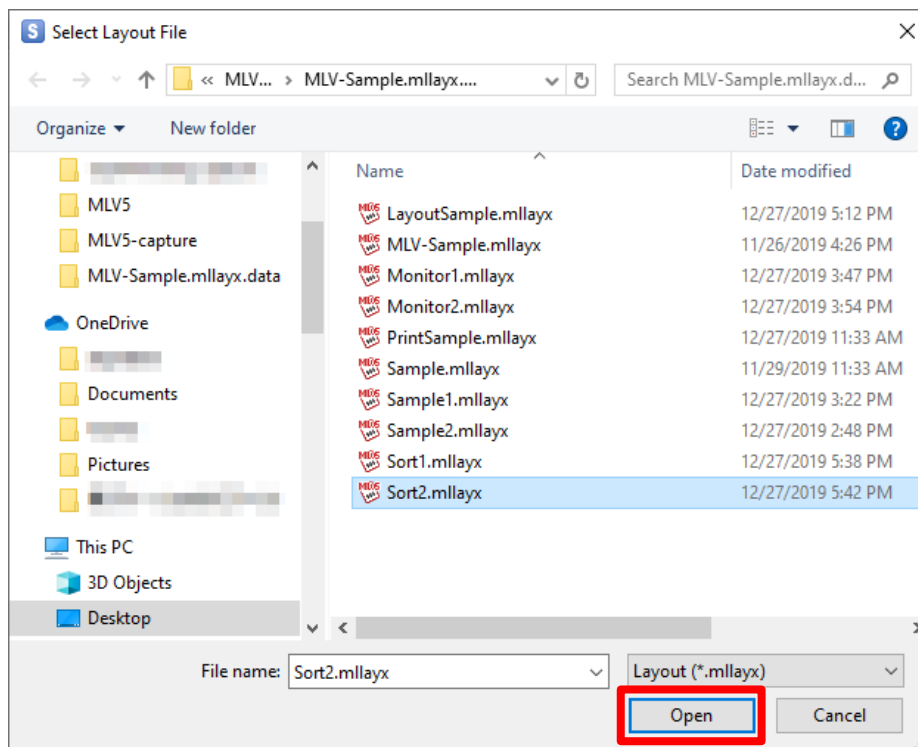
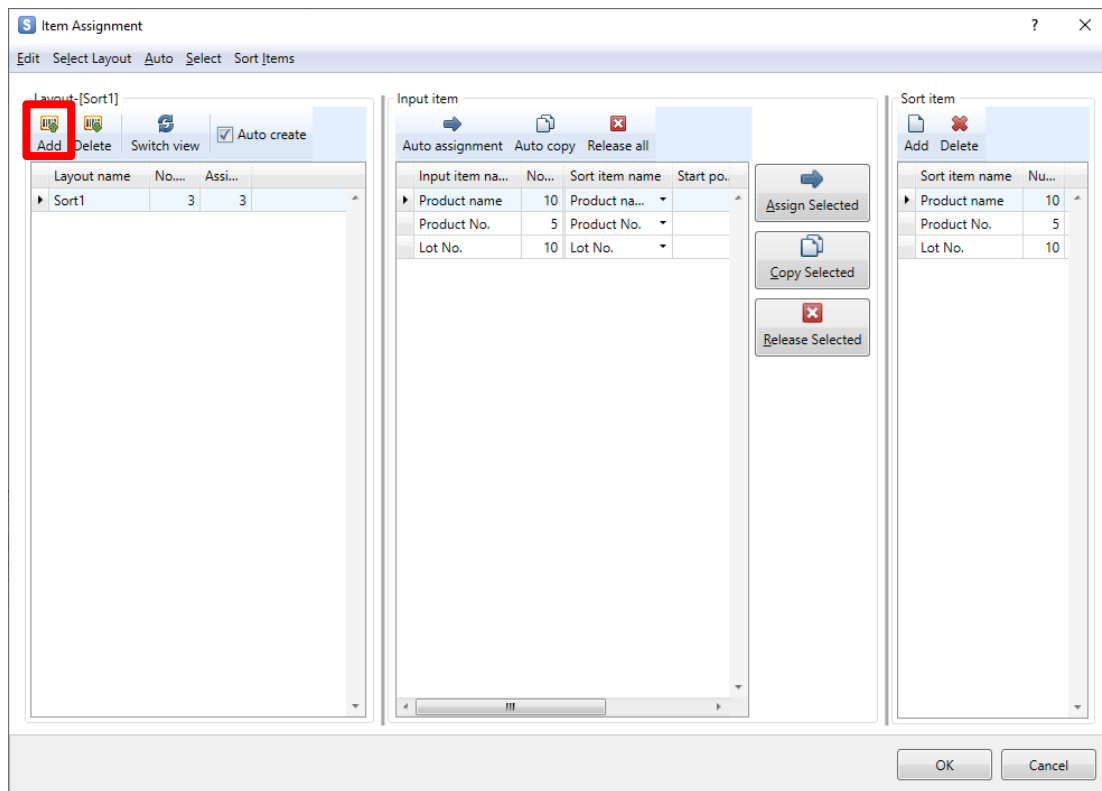
Check the “Auto create” check box and click the “Add” button.



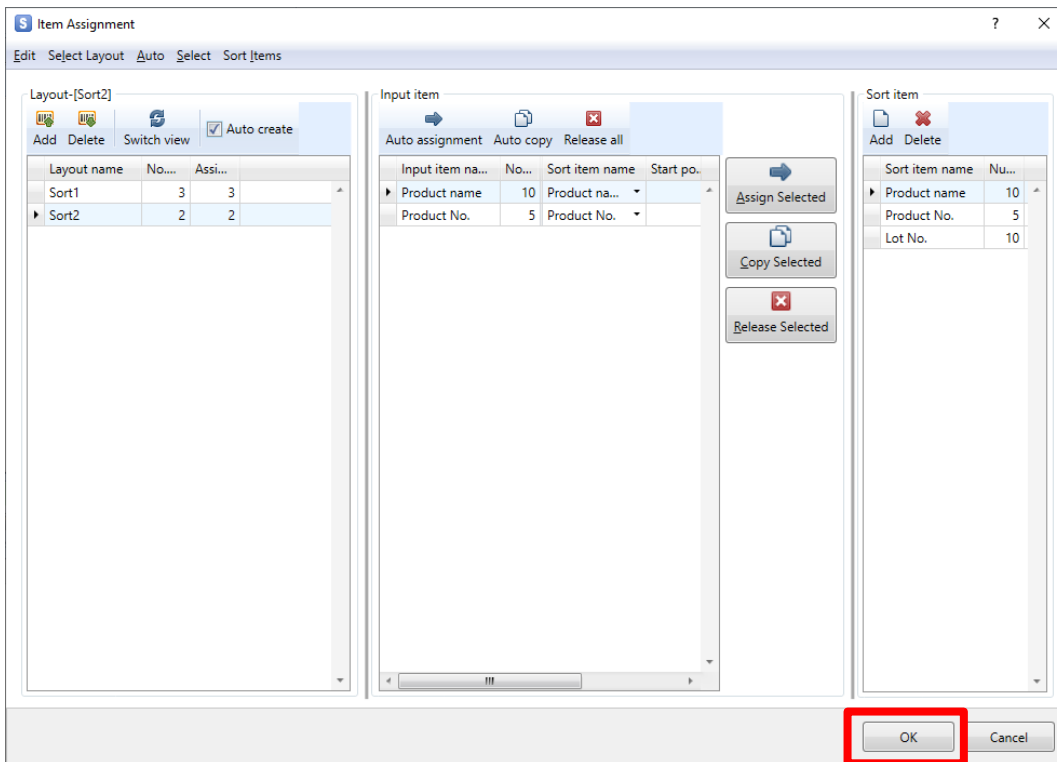
Select “Sort1.mllayx” and click “Open”.



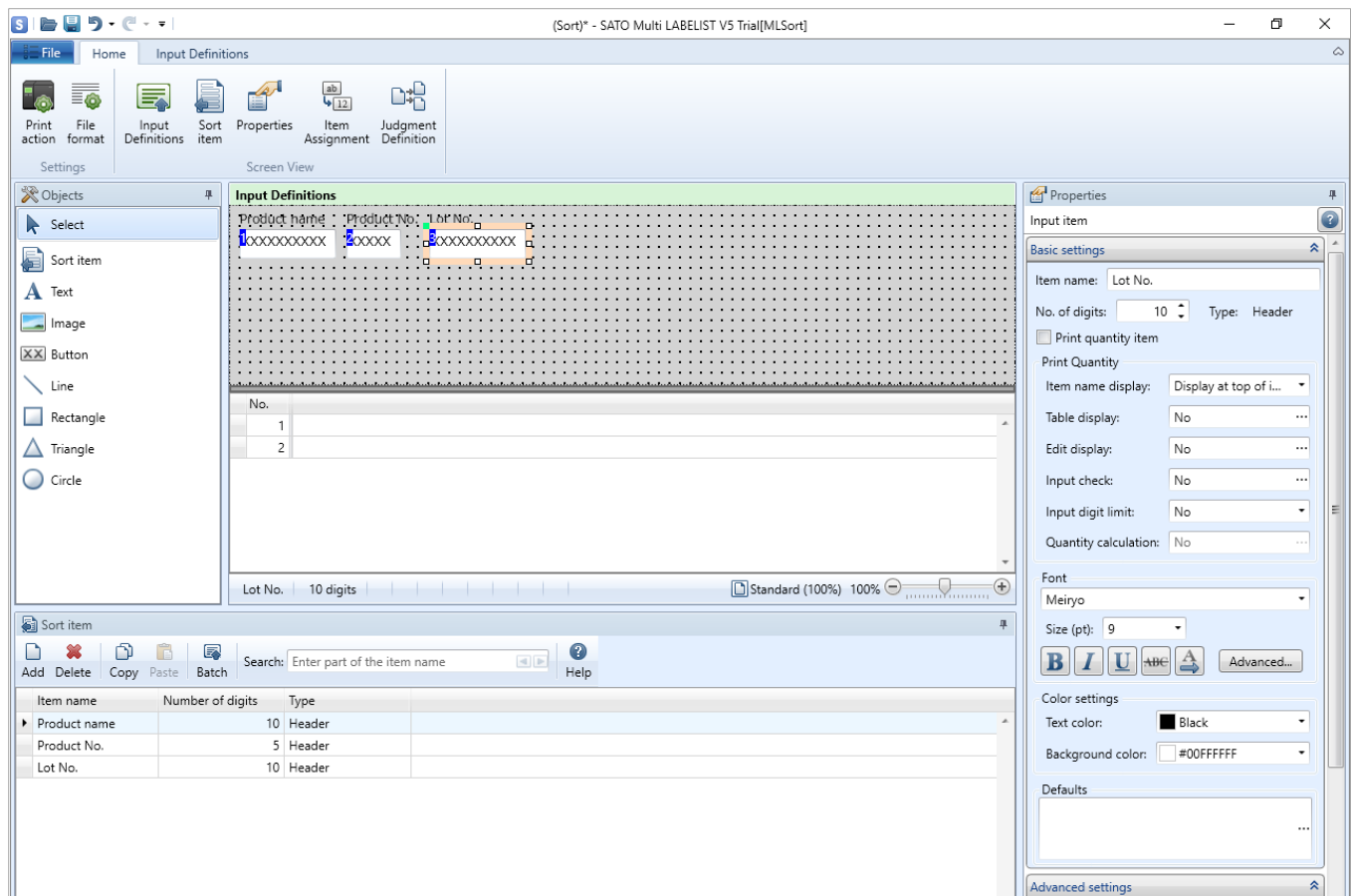
Then click the “Add” button, select “Sort2.mllayx” that has been registered, and click “Open”.



Does the screen shown below appear?
If it appears, click "OK".



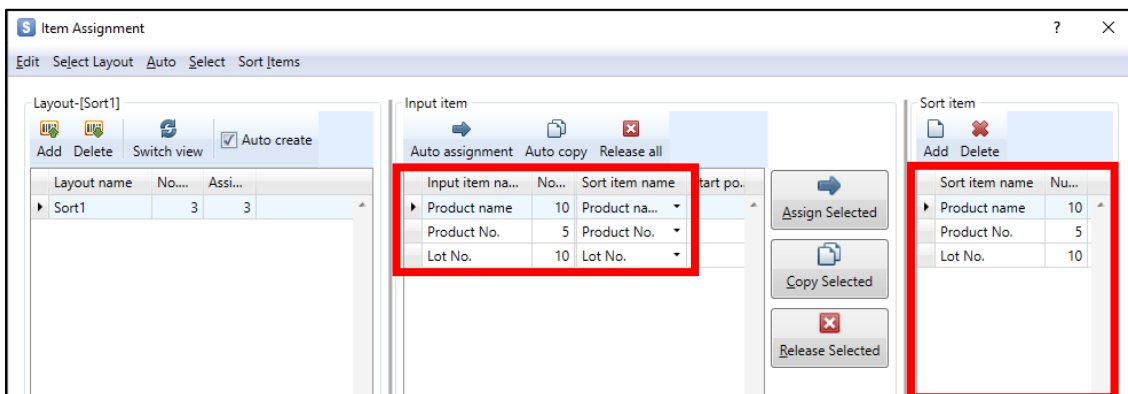
The Sort item is added and the items are placed on the Input Definitions screen.



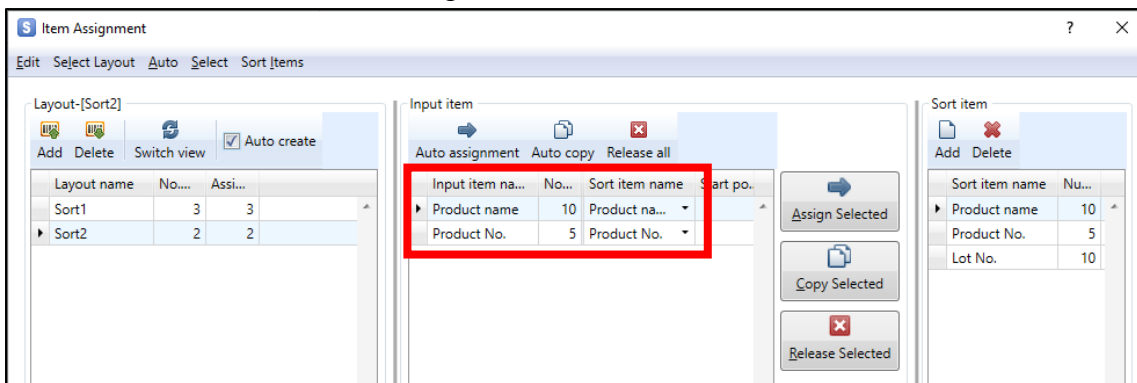
■ Item assignment using Auto create

When a layout is added with “Auto create” enabled, items for “Sort item” are added and items for each layout and sort items can be assigned automatically.

For “Sort1.mllayx” and “Sort2.mllayx”, “Product name”, “Product number”, and “Lot No.” that have been set as Input items on “Sort1” being added to “Sort Definition Items”, each input item is assigned to the Sort item having the same name.



When “Sort2” is added, “Product name” and “Product number” that have been set as input items in “Sort Definition Items”, are assigned.



If “Auto create” is disabled, make these settings manually, using the “Copy Selected” or “Assign Selected” buttons.

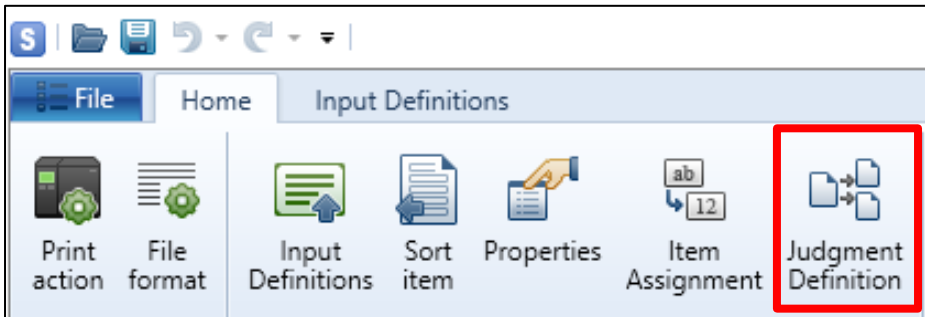
3. Layout Judgement

After sort definition and input assignment, make settings for layout judgement items.

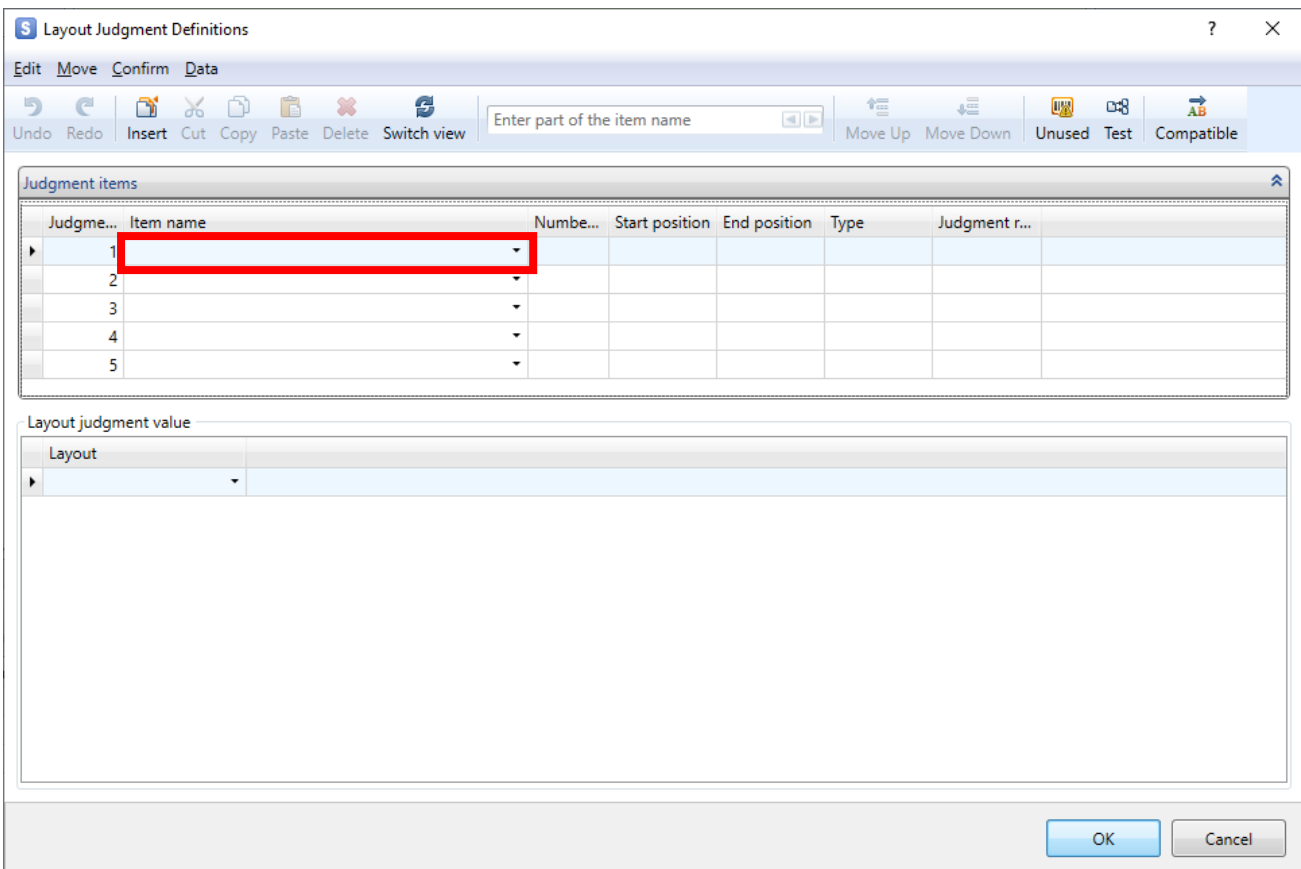
This designates the key item for sorting layouts.

In this practice, make settings to print “Sort1.mllayx” for the input “Product number” 00001 and “Sort2.mllayx” for the input “Product number” 00002.

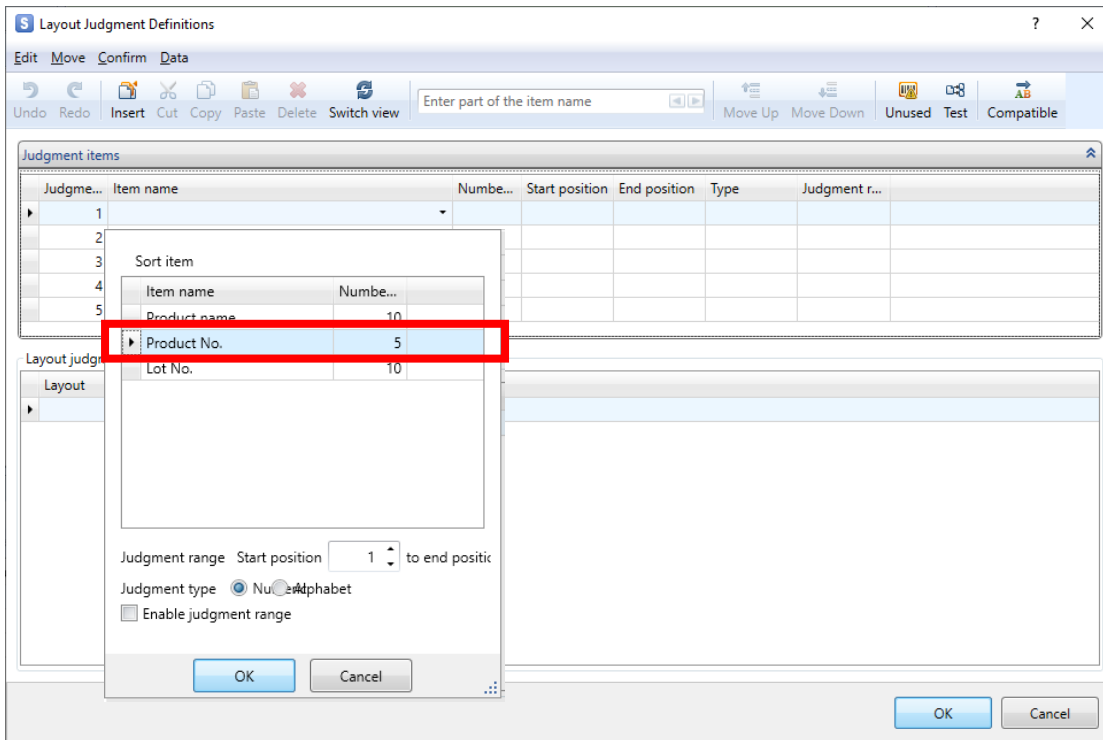
Click the “Judgment Definition” button to open the “Layout Judgment Definitions” screen.



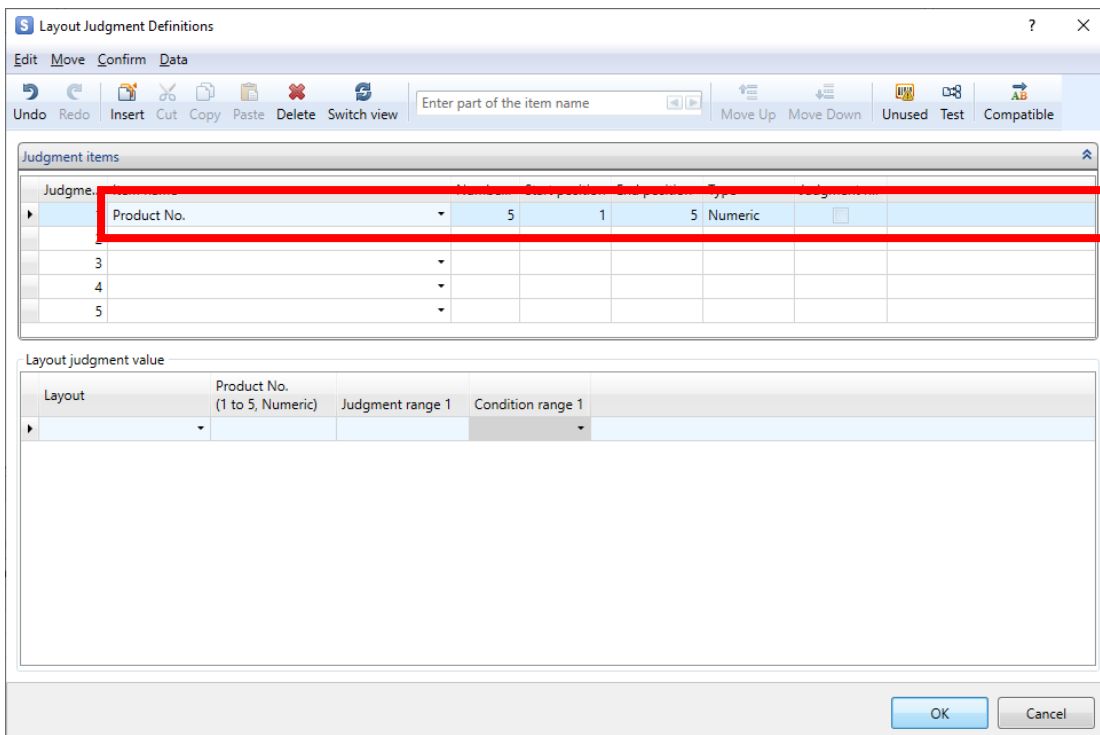
When the “Layout Judgment Definitions” screen is displayed, click the input column of “Item name”.



Select a product number from “Sort item” and click “OK”.



The Product number is added to the Judgment items.



Select "Sort1" from Layout.

Then press the Enter key for entering the judgment value.

Layout Judgment Definitions

Edit Move Confirm Data

Undo Redo Insert Cut Copy Paste Delete Switch view Enter part of the item name Move Up Move Down Unused Test Compatible

Judgme...	Item name	Numbe...	Start position	End position	Type	Judgment r...
1	Product No.	5	1	5	Numeric	
2						
3						
4						
5						

Layout judgment value

Layout	Product No. (1 to 5, Numeric)	Judgment range 1	Condition range 1
Sort1			
Sort2			

OK Cancel

Enter "00001" as the judgment value.

Layout Judgment Definitions

Edit Move Confirm Data

Undo Redo Insert Cut Copy Paste Delete Switch view Enter part of the item name Move Up Move Down Unused Test Compatible

Judgme...	Item name	Numbe...	Start position	End position	Type	Judgment r...
1	Product No.	5	1	5	Numeric	
2						
3						
4						
5						

Layout judgment value

Layout	Product No. (1 to 5, Numeric)	Judgment range 1	Condition range 1
Sort1	00001	=	

OK Cancel

Select "Sort2" from Layout.

Then press the Enter key for entering the judgment value.

Layout Judgment Definitions

Edit Move Confirm Data

Undo Redo Insert Cut Copy Paste Delete Switch view Enter part of the item name Move Up Move Down Unused Test Compatible

Judgme...	Item name	Numbe...	Start position	End position	Type	Judgment r...
1	Product No.	5	1	5	Numeric	<input type="checkbox"/>
2						
3						
4						
5						

Layout judgment value

Layout	Product No. (1 to 5, Numeric)	Judgment range 1	Condition range 1
Sort1	00001	=	
X Sort2		=	
Sort1			
Sort2			

OK Cancel

Enter "00002" as the judgment value.

Layout Judgment Definitions

Edit Move Confirm Data

Undo Redo Insert Cut Copy Paste Delete Switch view Enter part of the item name Move Up Move Down Unused Test Compatible

Judgme...	Item name	Numbe...	Start position	End position	Type	Judgment r...
1	Product No.	5	1	5	Numeric	<input type="checkbox"/>
2						
3						
4						
5						

Layout judgment value

Layout	Product No. (1 to 5, Numeric)	Judgment range 1	Condition range 1
Sort1	00001	=	
X Sort2	00002	=	

OK Cancel

After entering the judgment values, click "OK".

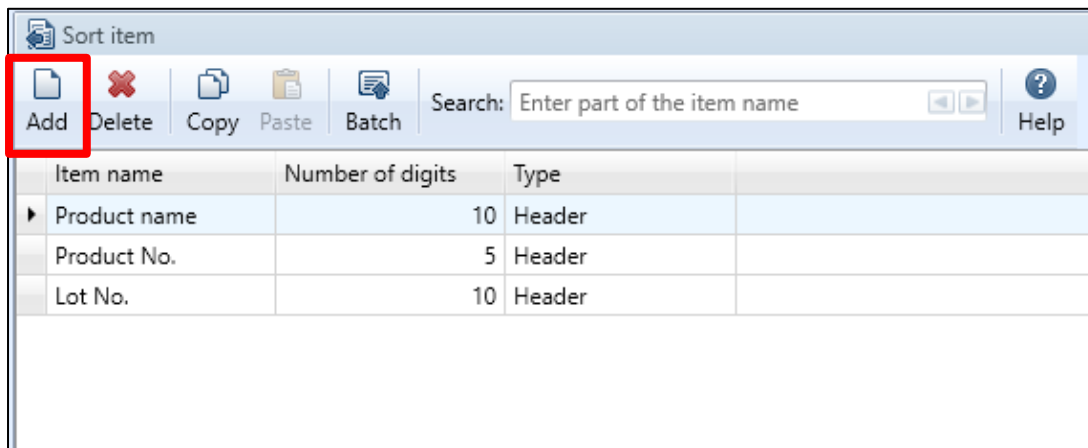
4. Settings Sort Items

Make settings for Sort items.

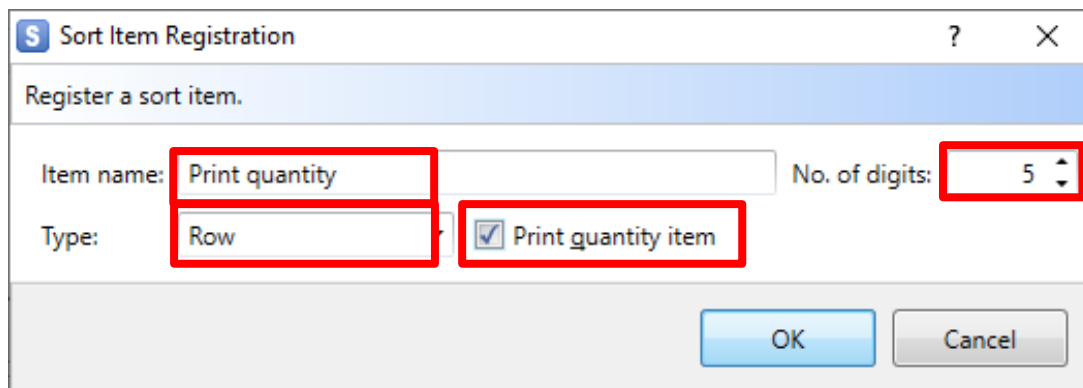
A print quantity item is necessary for sorting.

Add the print quantity item here.

Click the “Add” button.




Enter the Item name and the number of digits of Print quantity, designate the layout location of the added items (header or row), and check “Print quantity item”.




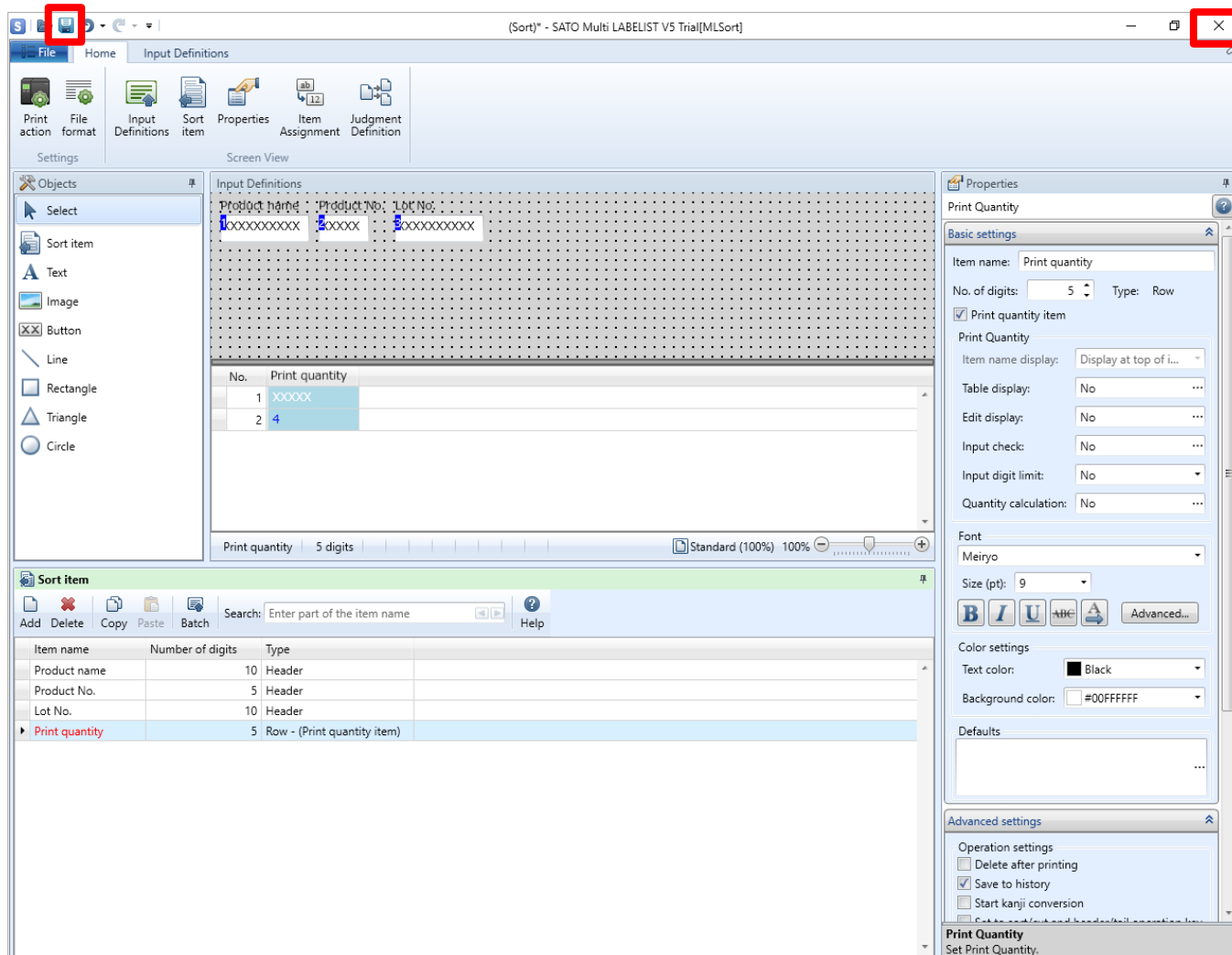
Could you make settings as shown below?

Check that the “Print quantity” is displayed in red.

Item name	Number of digits	Type
Product name	10	Header
Product No.	5	Header
Lot No.	10	Header
Print quantity	5	Row - (Print quantity item)

When the item settings are complete, click “” (Save) to save a created sort file named as “Sort Practice”.

Click the “” (Exit) button.



The screenshot shows the SATO Multi LABELIST V5 software interface. The 'Sort item' dialog box is open, displaying a table with the following data:

No.	Print quantity
1	XXXXXX
2	4

The 'Print quantity' item is highlighted in red in the original image. The 'Properties' panel on the right shows the following settings for 'Print quantity':

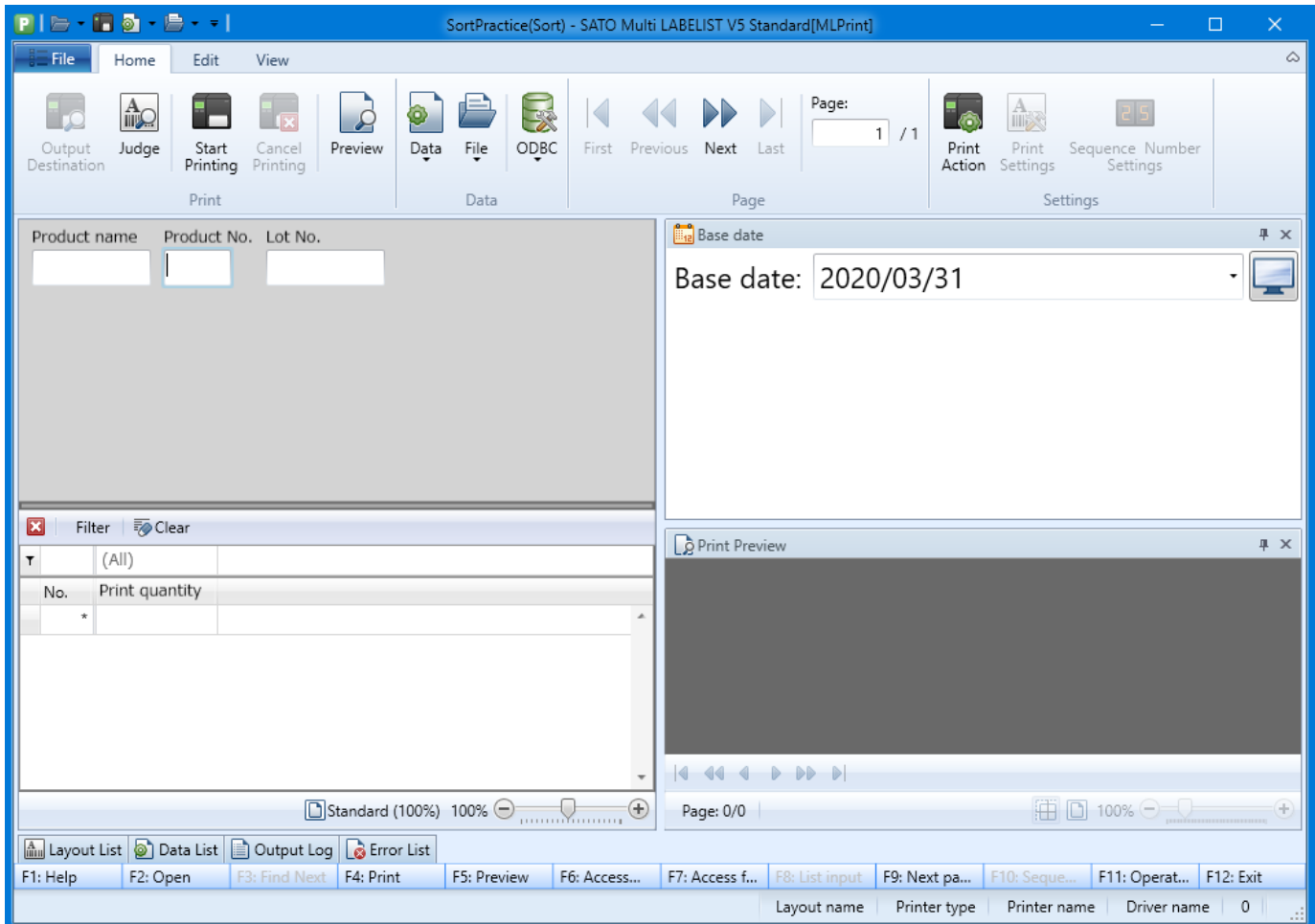
- Item name: Print quantity
- No. of digits: 5
- Type: Row
- Print quantity item
- Print Quantity
- Item name display: Display at top of i...
- Table display: No
- Edit display: No
- Input check: No
- Input digit limit: No
- Quantity calculation: No
- Font: Meiryo
- Size (pt): 9
- Color settings: Text color: Black, Background color: #00FFFFFF
- Advanced settings:
 - Delete after printing
 - Save to history
 - Start kanji conversion

The 'Print quantity' item is highlighted in red in the original image. The 'Print quantity' item is highlighted in red in the original image.

5. Sort Printing

Double-click the “Sort Practice.mldex” file saved before to start MLPrint.

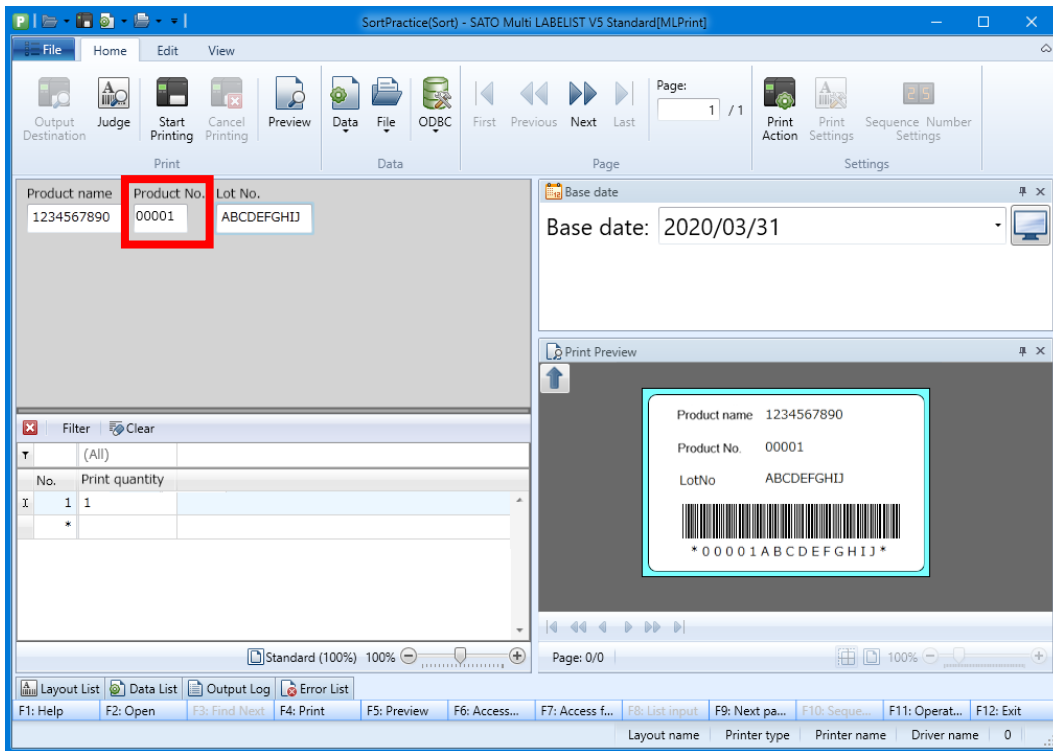
Check that the layouts are sorted and printed by printing the Sort file created in MLSort.



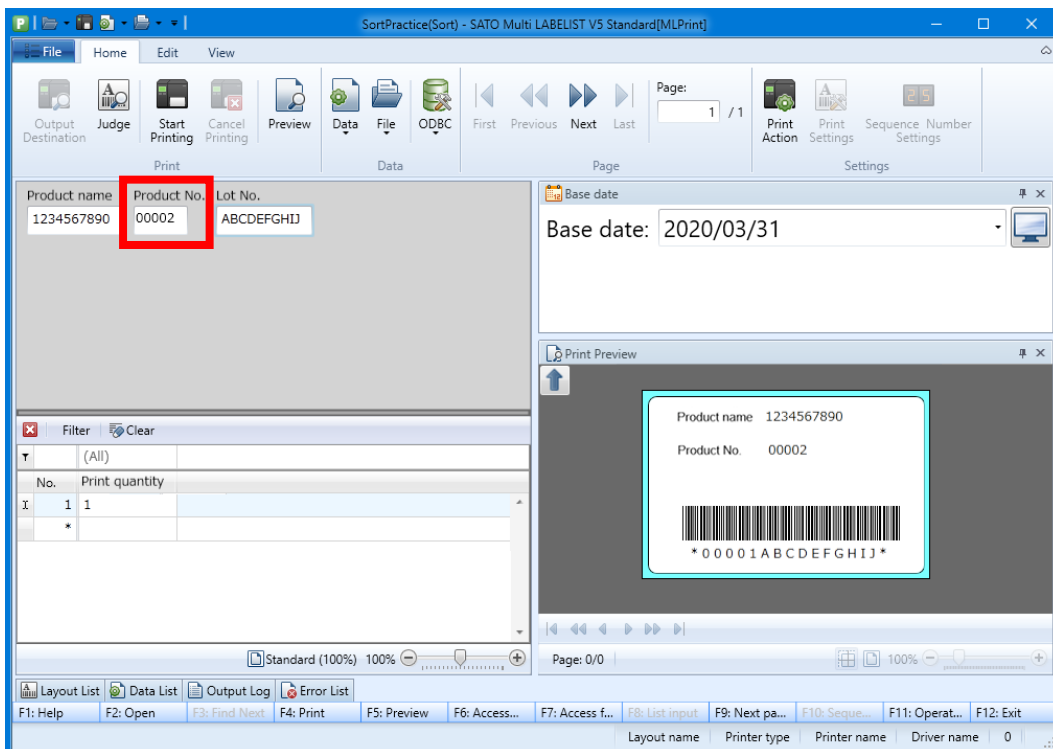
The Sort Print screen is displayed. Enter the items.

6. Checking the Print Results

Enter “00001” in “Product No.” and print “Layout 1”.



Enter “00002” in “Product No.” and print “Layout 2”.



Did they print successfully?

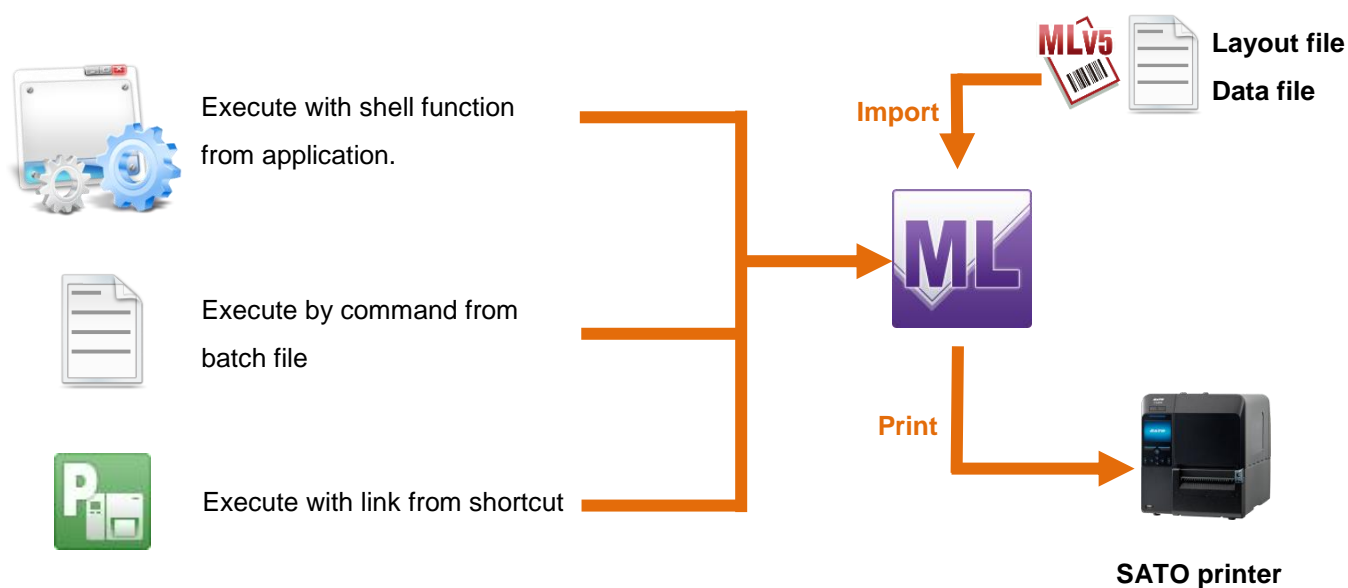
This completes “2: Sort Printing”.

3: Automatic Printing

Let's try automatic printing using a sample layout.

1. What Is Automatic Printing?

Automatic Printing is a function to start the print program of Multi LABELIST V5 with an external application, such as a user program or Microsoft Windows [Run], to give parameters and to implement the operations according to the parameters.



■ Format

“(1) Execution program path”_“(2) ML file path”_Parameter_“(3) Parameter setting value”

* The underscore (“_”) represents a single-byte space.

(1) Execution program path

Specify the full path.

If the installation directory has not be changed, the path is as described below.

32bitOS : C:¥Program Files¥SATO¥MLV5¥MLPrint.exe

64bitOS : C:¥Program Files(x86)¥SATO¥MLV5¥MLPrint.exe

(2) ML file path

Specify the layout file (*.mlayx) or sort file (*.mldenx) with the full path.

(3) Parameter setting value

Specify the setting value according to the parameter.

Some parameters do not need the setting value.

* For customers who moved from Multi LABELIST V4

For printing, add a new parameter Start Printing "/O".

```
"C:\Program Files\MLV4\MLPrint.exe" "C:\Layout.mlay" /g "C:\Sample.csv"
```

```
=>"C:\Program Files\SATO\MLV5\MLPrint.exe" "C:\Layout.mlayx" /g "C:\Sample.csv" /o
```

Change the quotation characters for specifying output (/V, /D) from [] to "".

```
"C:\Program Files\MLV4\MLPrint.exe" "C:\Layout.mlay" /v[SATO CL4NX] /g "C:\Sample.csv"
```

```
=>"C:\Program Files\SATO\MLV5\MLPrint.exe" "C:\Layout.mlayx" /v "SATO CL4NX" /g "C:\Sample.csv" /o
```

■ Parameter List

Specification Function	Parameter	Operation
Specify data		
Import a file	/G (g)	The MLPrint screen starts and the specified file is imported.
Import data	/I(i)	The MLPrint screen starts and the specified data are imported.
Specify Operation		
The Print screen is displayed.	No	For no operation specifying parameters, the print screen is displayed.
Start Printing	/O(o)	Print processing is done.
Print preview	/P(p)	The print preview screen is displayed.
Specify output destination		
Follow the Layout file.	No	For no output destination parameters, use the output destination specified by the Layout file.
Specify a printer driver.	/V(v)	Use the specified printer driver.
Specify setting file * Sort file only	/D(d)	Specify the printer driver for each layout, using the setting file.
Specify Options		
Reference-Only mode	/K(/k)	Open a layout with Reference-Only mode.
Specify tax rate	/Z(/z)	Specify the tax rate when printing

Details on the functions of each parameter are described below.

Although the parameters are written in uppercase, lowercase may also be used.

All parameters for which no layout or sort file is specified will be ignored.

■ Specify data

Import a file: /G parameter

- The specified file is imported, MLPrint starts, and the data are imported.
- If this parameter is used in conjunction with the /I parameter (import data), only this parameter is processed and the /I parameter is ignored.
- This parameter is ignored if the specified file does not exist.

Import data: /I parameter

- The specified data are imported, MLPrint starts, and the data are called.
- If this parameter is used in conjunction with the /G parameter (import File), this parameter setting is ignored and the /G parameter is processed.
- This parameter is ignored if the specified data do not exist.

■ Specify Operation

Start Printing: /O parameter

- Start MLPrint using the specified layout file (sort file) and start printing.
- This is used in conjunction with the /G (specifying an external file) or /I (specifying internal data) parameter.
- If this parameter is used in conjunction with the /P parameter (print preview command), only this parameter is processed and the /P parameter is ignored.

Print preview: /P parameter

- The print preview screen is displayed.
- This is used in conjunction with the /G (specifying external file) or /I (specifying internal data) parameter.
- If this parameter is used in conjunction with the /O parameter (print start command), this parameter is ignored and the /O parameter is processed.

■ Specify output destination

Specify a printer driver.: /V parameter

- Specify the name of the output printer driver.
- This is used in conjunction with the /G (specifying a file) or /I (specifying data) parameter.
- Used in conjunction with the /O (print start).
- If this parameter is used in conjunction with the /D parameter (specify a setting file), only this parameter is processed and the /D parameter is ignored.
- This parameter is ignored if the specified destination does not exist.
- An example of specifying a parameter for the printer driver is as described below.

Sort file	: C:¥ML¥Test.mldex
External file	: C:¥ML¥Text.txt
Output destination of printer driver	: SATO SG408

```
"C:¥Program Files¥MLV5¥MLPrint.exe" "C:¥ML¥Test.mldex" /G "C:¥ML¥Text.txt" /V "SATO SG408" /O
```

Specify a setting file: /D parameter *Sort file only

- Specify the setting file path to which the output destination for each layout has been set. *1
- This is used in conjunction with the /G (specifying a file) or /I (specifying data) parameter.
- This is used in conjunction with the /O (print start) parameter.
- If this is used in conjunction with the /V parameter (specify a printer driver), this parameter is ignored and only the /V parameter is processed.
- If the specified file does not exist, this parameter is ignored.
- An example of specifying a parameter of the output destination file is as shown below.

Sort file : C:\ML\Test.mldex
 External file : C:\ML\Text.txt
 Output destination file : C:\ML\Out.txt

```
"C:\Program Files\MLV5\MLPrint.exe" "C:\ML\Test.mldex" /G "C:\ML\Text.txt" /D "C:\ML\Out.txt" /O
```

***1 Setting file format (Tab-separated text)**

- If no layout file or driver name exists, the data is output from the default output destination of the layout file.
- Specify the layout name and driver name for each record.

Layout name (With full path including extension)	Tab (09h)	Driver name	CR / LF (0Dh/0Ah)
---	--------------	-------------	----------------------

■ Specify Options**Reference-Only mode : /K parameter**

- A layout file opens in the Reference-Only mode.
- In Reference-Only mode, multiple layout files can be used at a time, but the information (Sequence number settings, Save sequence number of Local variable, Output destination settings, File format settings, Print action settings, and Print settings) changed in printing cannot be saved. **Especially when Save sequence number is used, do not use Reference-Only mode.**

Specify tax rate: /Z parameter

- Specify the tax rate when printing from 0.0 to 100.0.
- This is used in conjunction with the /O (print start) parameter.
- When the tax rate is specified with this parameter, the tax rate set by tax editing (user's tax rate or fixed value) will not be used.

2. Creating a Shortcut

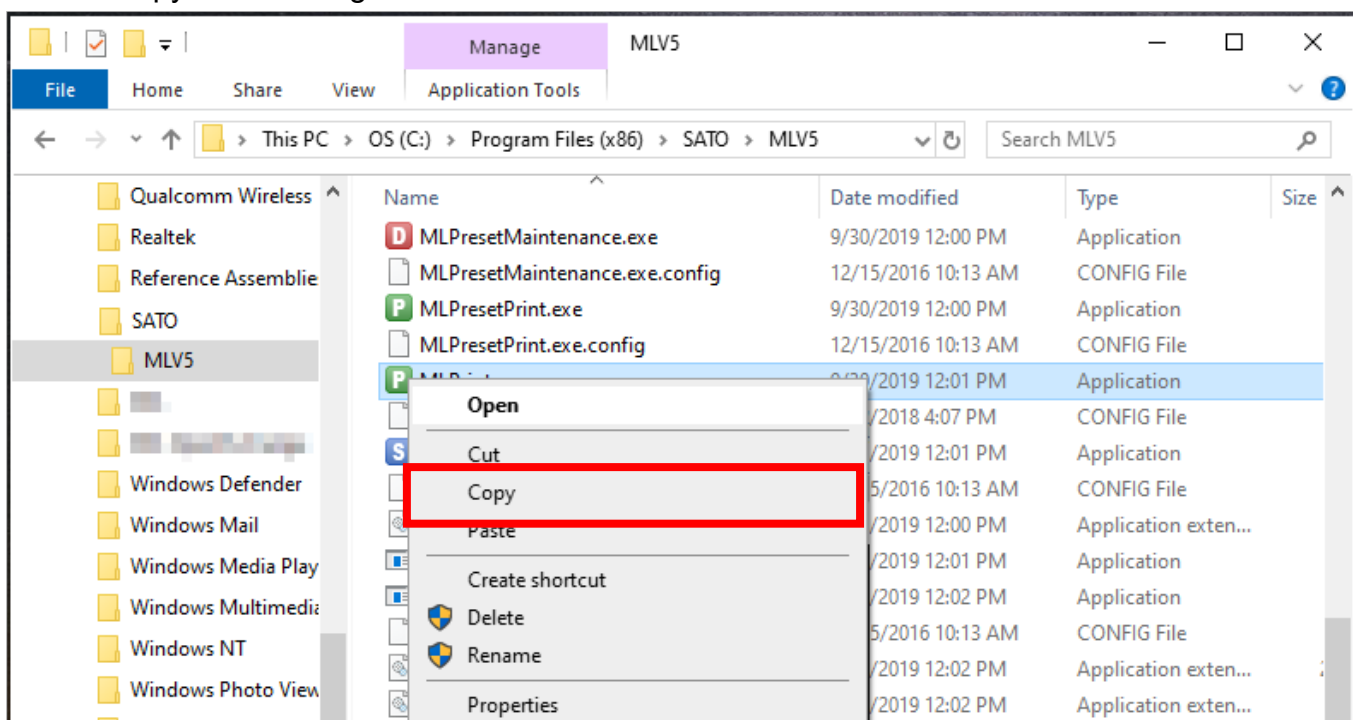
In this section, it is described how to create a shortcut icon for importing an external data named “Sample.csv” into layout file named “Layout.mlayx” and printing it automatically.

- These two files are assumed to be saved in C:¥TEST.
- External file format settings are required in advance according to the imported data.
(For setting method, refer to “[1: File Print - 2. File Format Settings](#)”.)

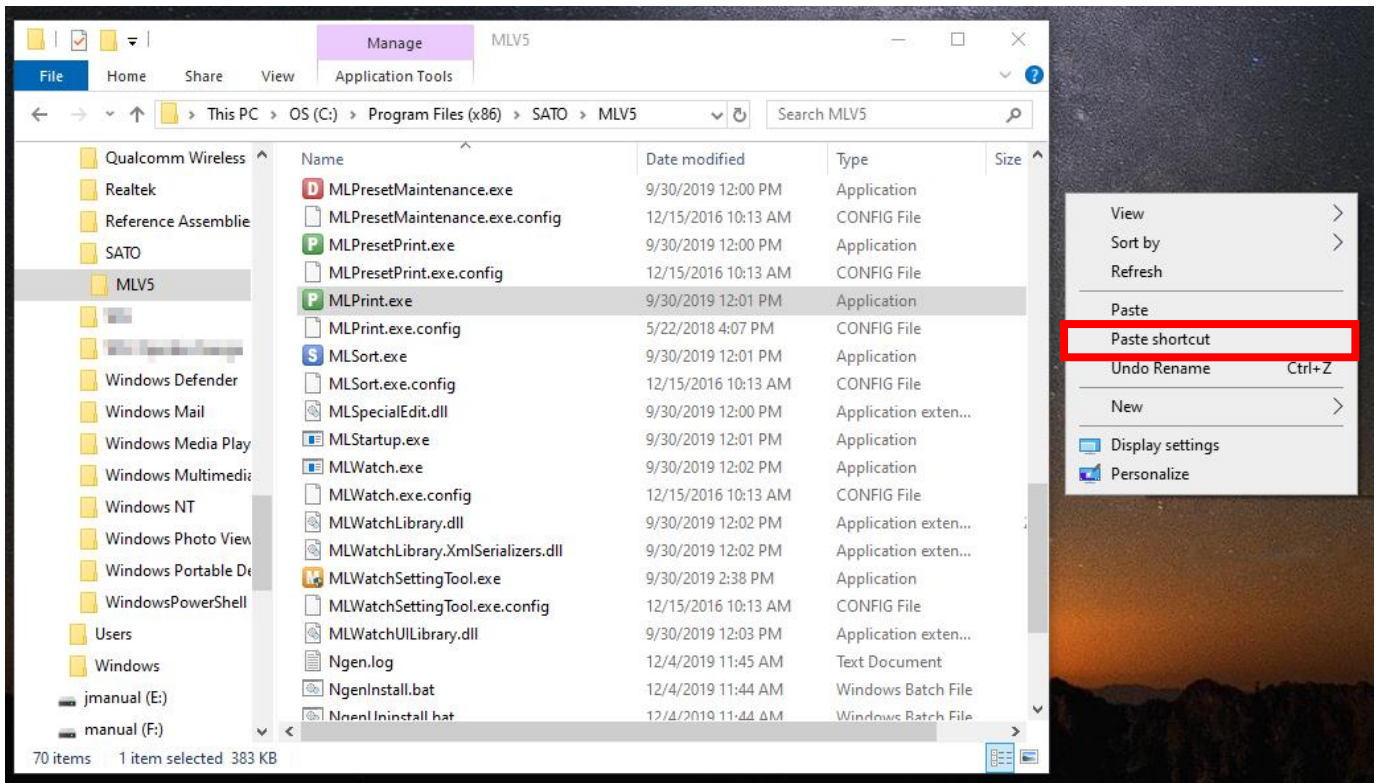
First, create a shortcut of the print program.

Select “MLPrint.exe” in “C:¥Program Files¥SATO¥MLV5” folder.

Select “Copy” from the right-click menu.



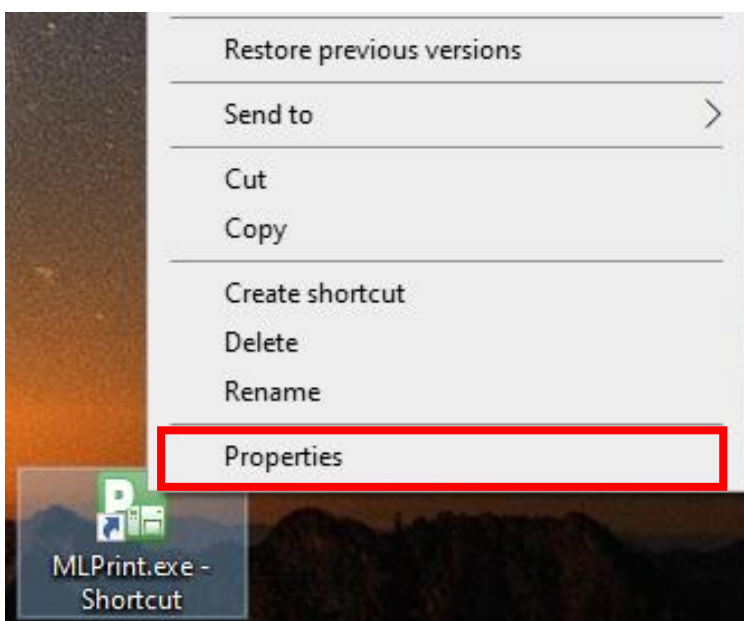
Then move the mouse to the desktop and select “Paste shortcut” from the right-click menu.



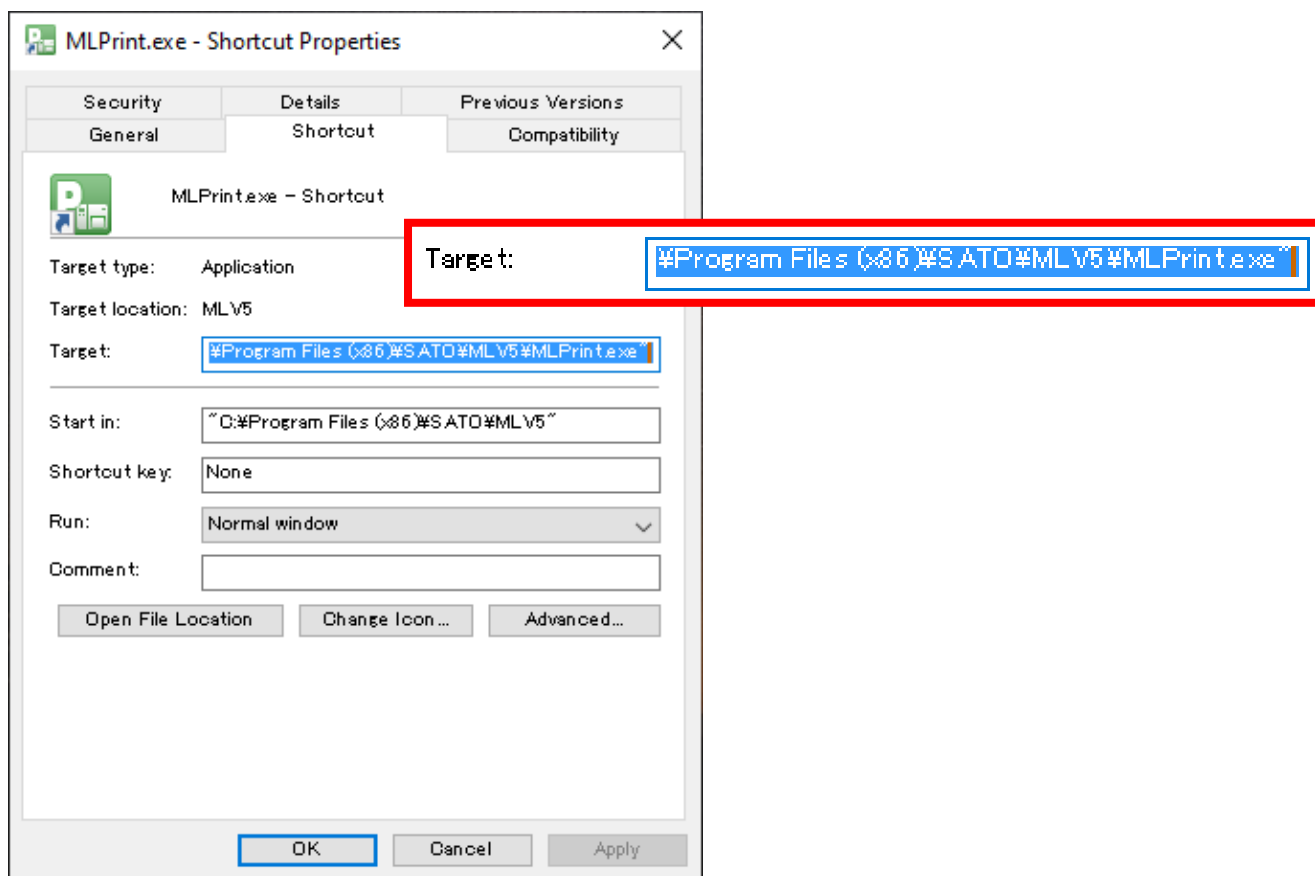
A shortcut to “MLPrint.exe” will be created on your desktop.



Select the created shortcut and open the properties from the right-click menu.



The “MLPrint.exe-Shortcut Properties” screen is displayed.
The full path to the Print program is displayed in Target.



Add “Layout file name”, “Parameter”, and “External file name” after “C:\Program Files\SATO\MLV5\MLPrint.exe”.

Finally, the Target will be as shown below. Click “OK”.

“C:\Program Files\SATO\MLV5\MLPrint.exe”_“C:\TEST¥Layout.mlayx”_/g_“C:\TEST¥Sample.csv”_/o

* The underscore (“_”) represents a space.

3. Using the Shortcut

Double-click the shortcut you created and the printing will start automatically according to the specified parameters.



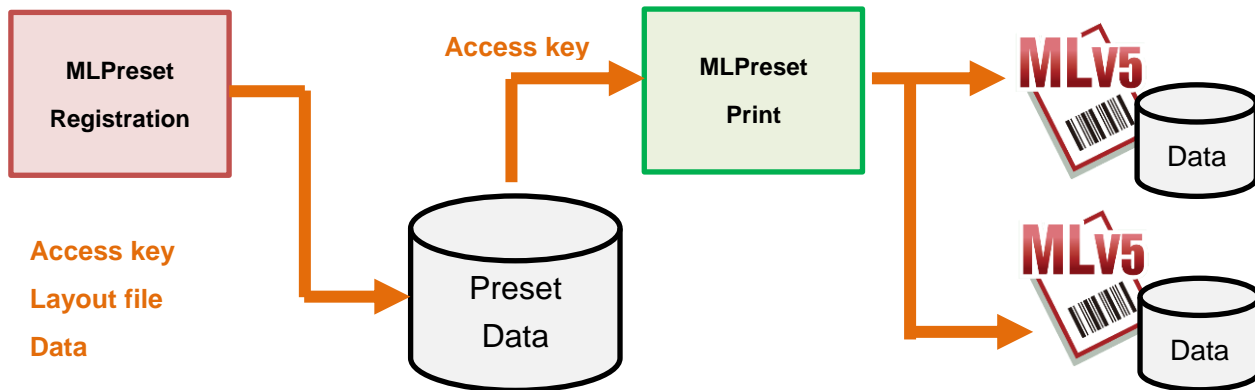
Did they print successfully?

This completes [“3. Automatic Printing”](#).

4: Preset Print

1. What is Preset Print?

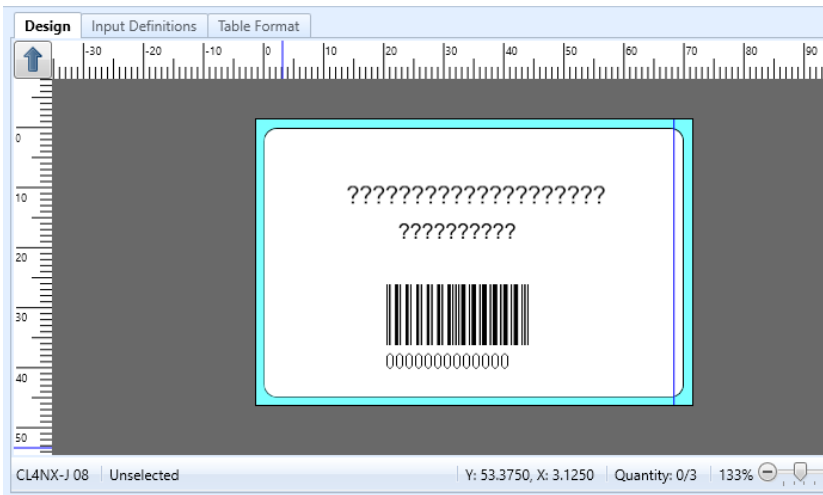
Preset Print is a function to register the print contents in advance and to print them by accessing the data with the Access key instead of entering data when printing. Accessed data can be collected and printed together.



■ Preparations

Create a layout as shown below, remembering the practice up to now.

- Printer model : CL4NX-J 08
- Paper : 45 mm x 70 mm (Length x Width)
- Layout name : Preset.mlayx

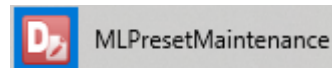


Variable name	Type	No. of digits	Details
Product name	Input	20	Input type: Character
Product No.	Input	10	Input type: Character
Barcode data	Input	12	Input type: Character

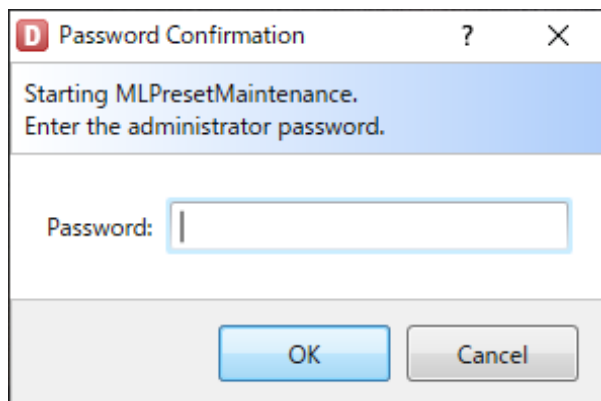
2. Preset Data Registration

First register the data to be printed.

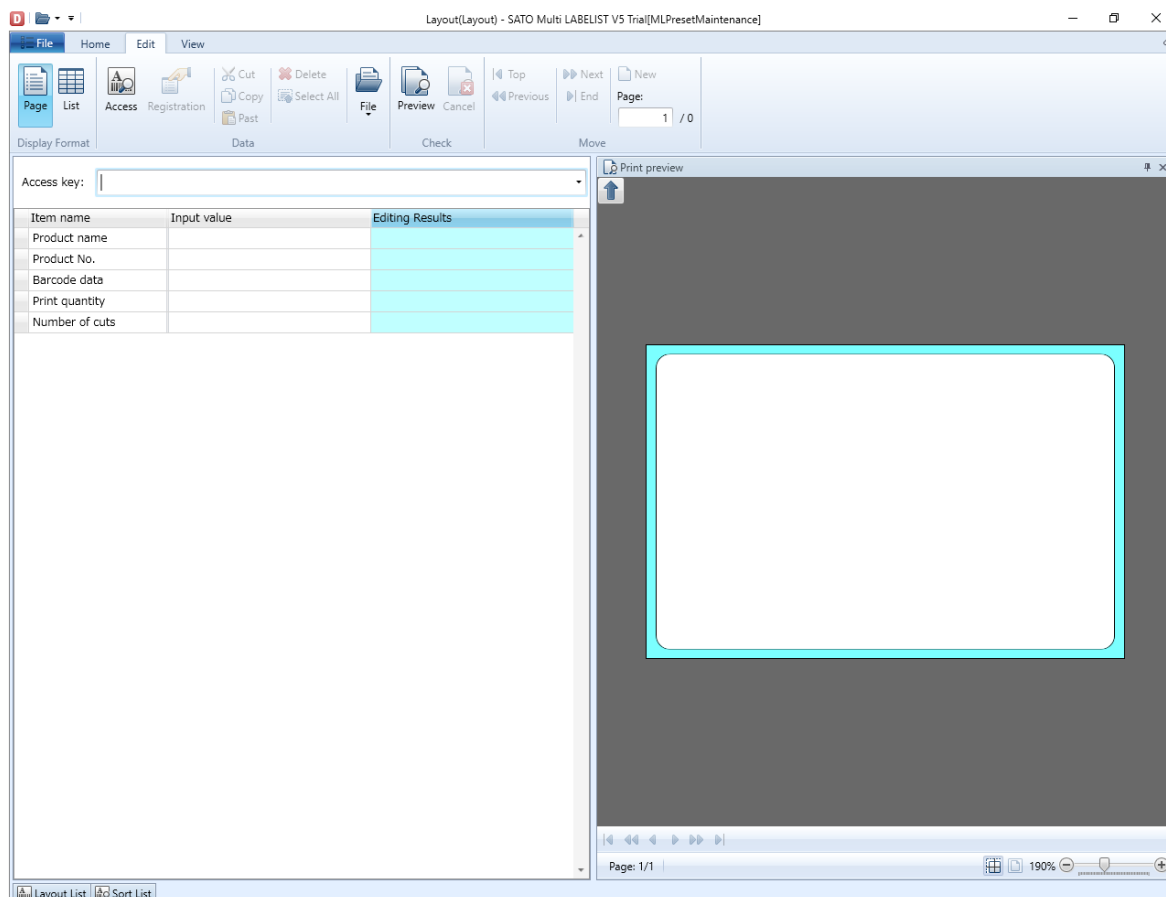
Select Windows Start Menu > All Programs > Multi LABELIST V5 >



After entering password, select the layout to which the print data is to be registered. In this practice, select "Layout.mlayx".

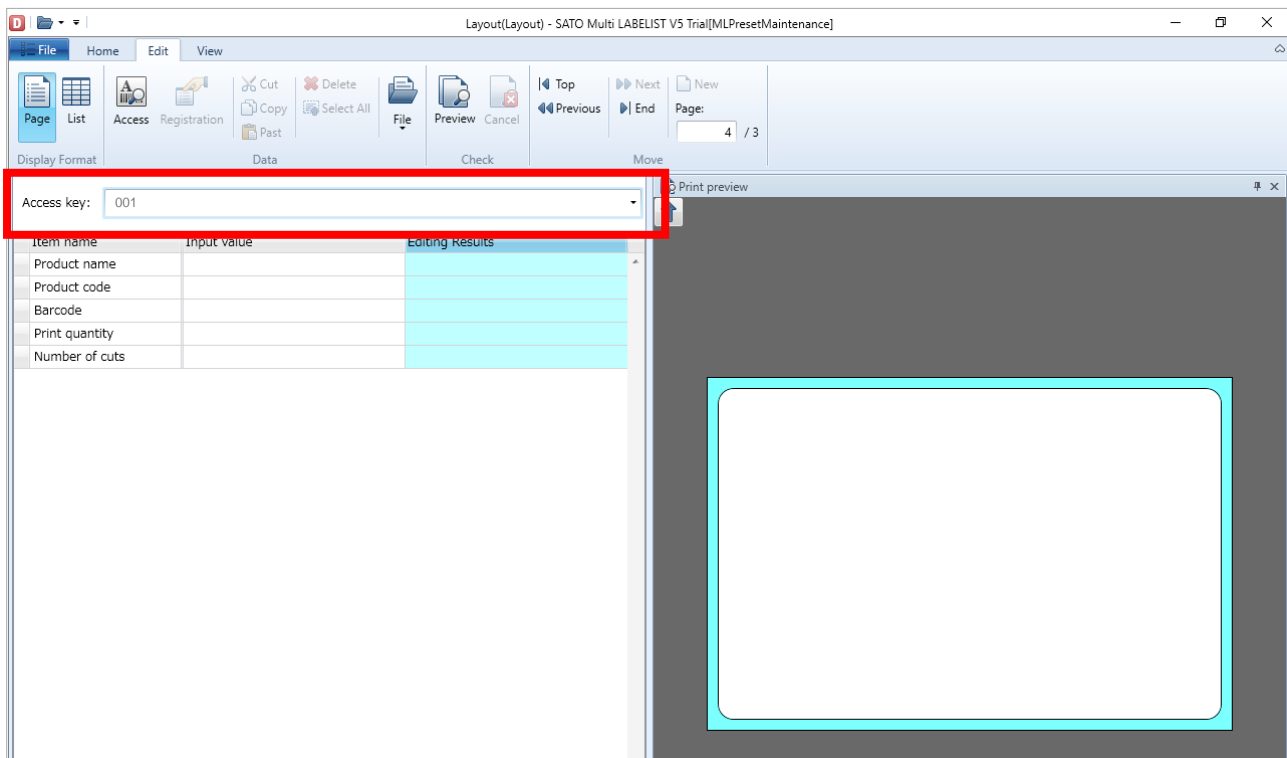


The MLPresetMaintenance screen appears.



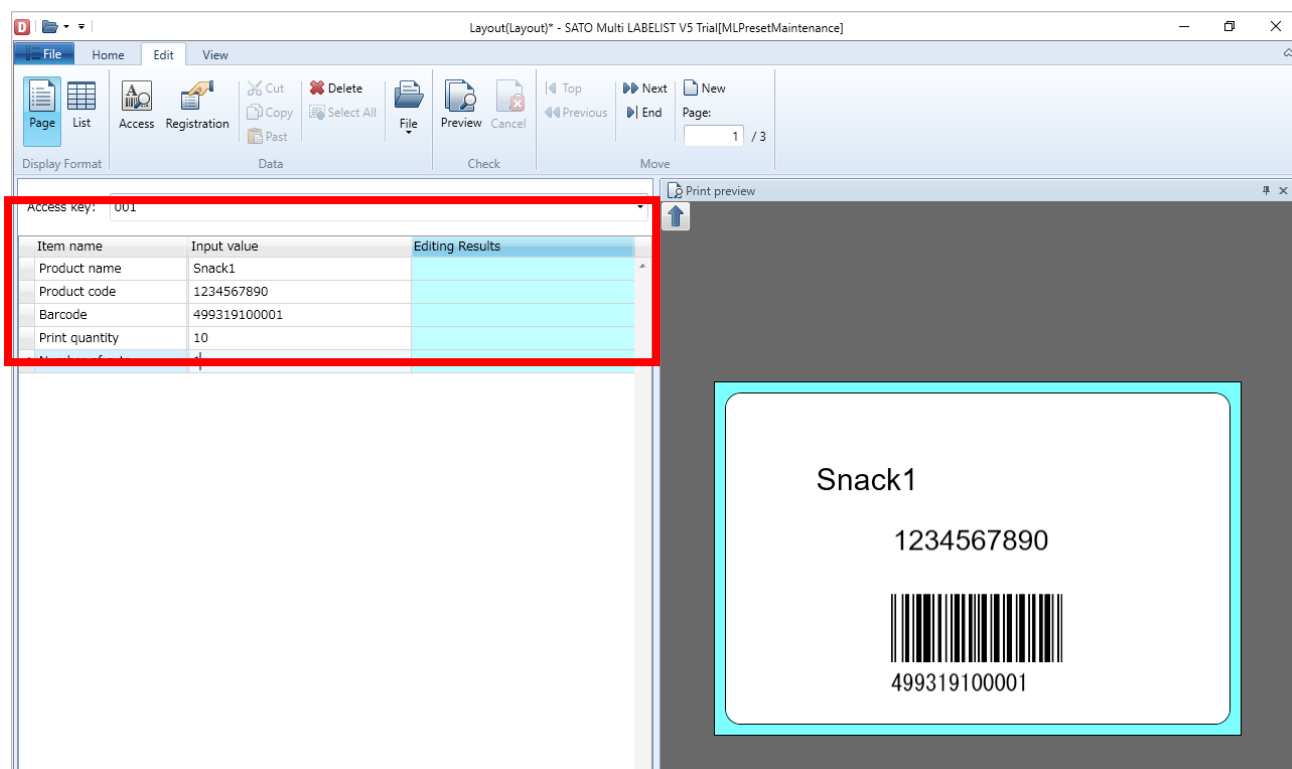
Then let's register the print data.

Enter the Access key. The Access key is an item used for printing as a key.

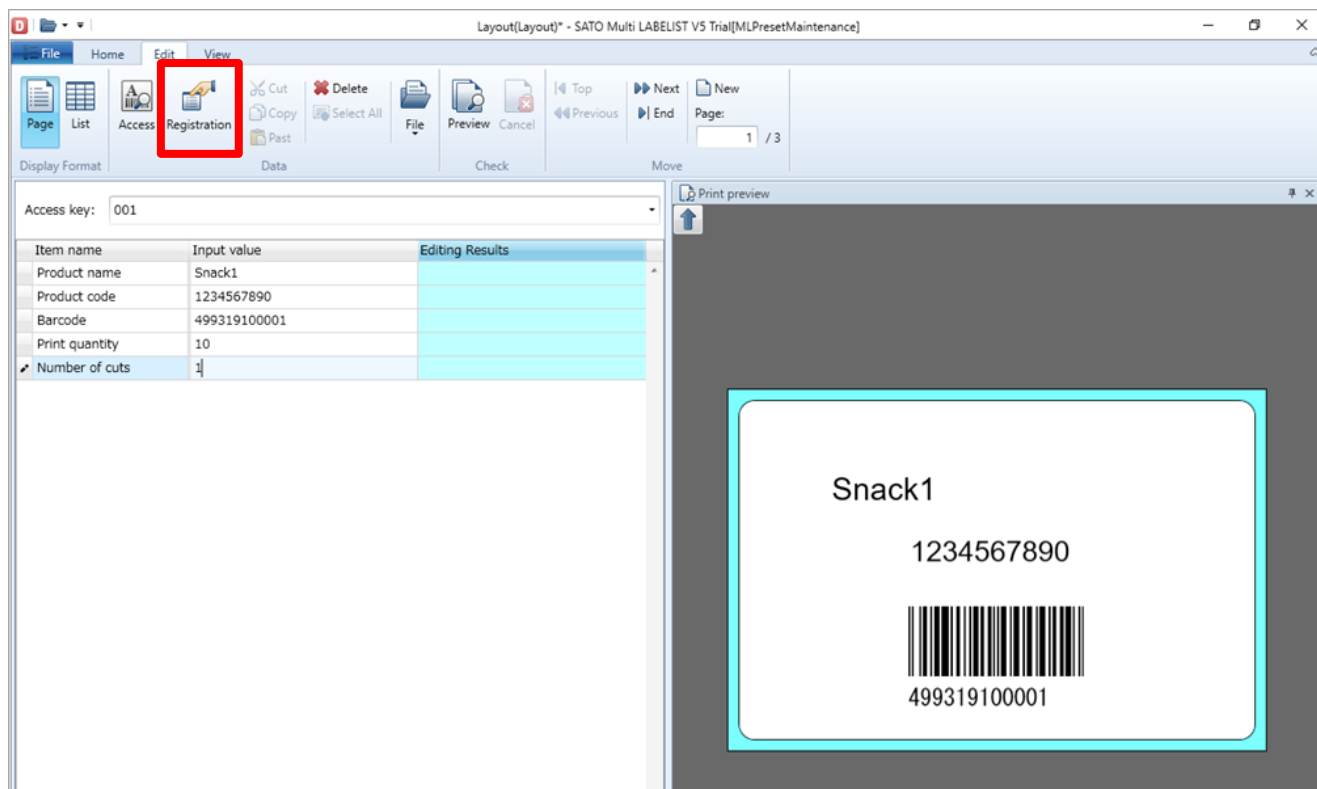


Enter the print data in each input item.

On the "Print preview" screen on the right, the print image can be previewed.



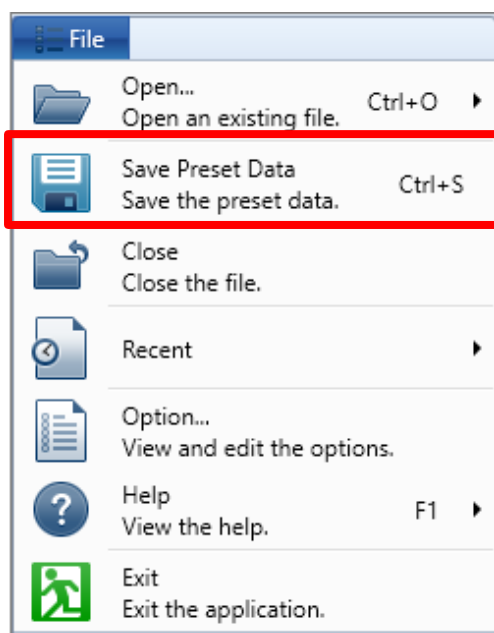
Click the "Registration" button to register the data.



Then register some data with the procedures above.

When registration ends, save the preset data.

Select "Save Preset Data " from the File menu.

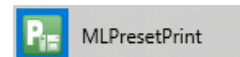


From the File menu, select Exit to finish MLPresetMaintenance.

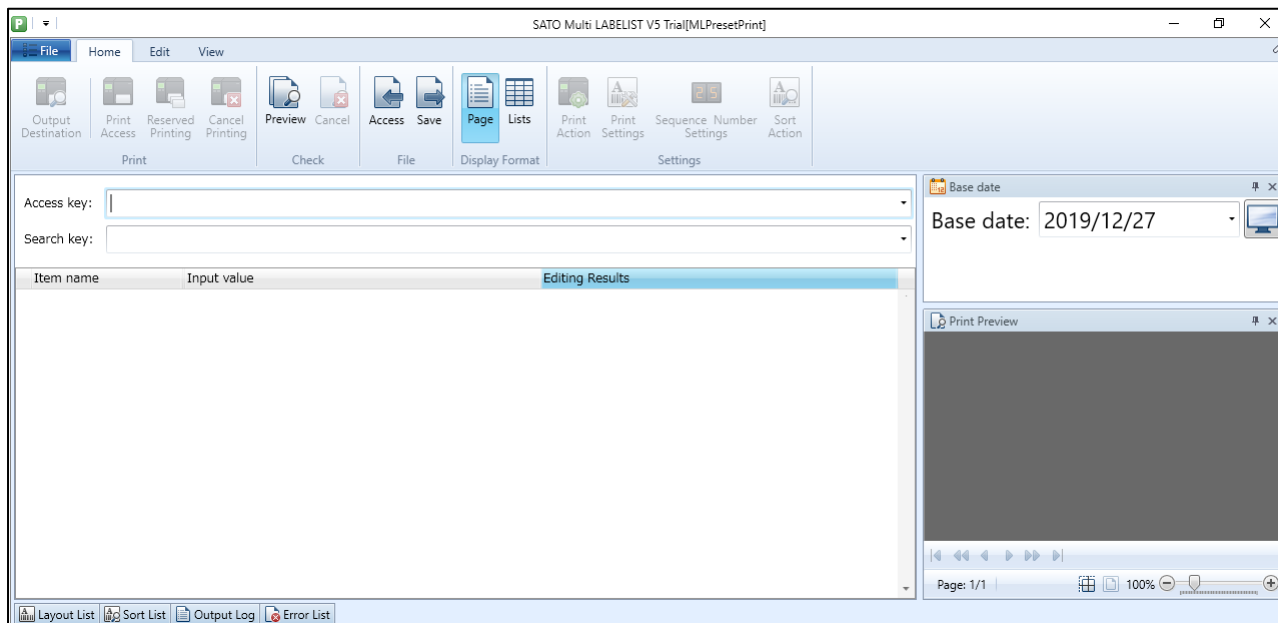
Then access the registered data and print them with MLPresetPrint.

3. Preset Print

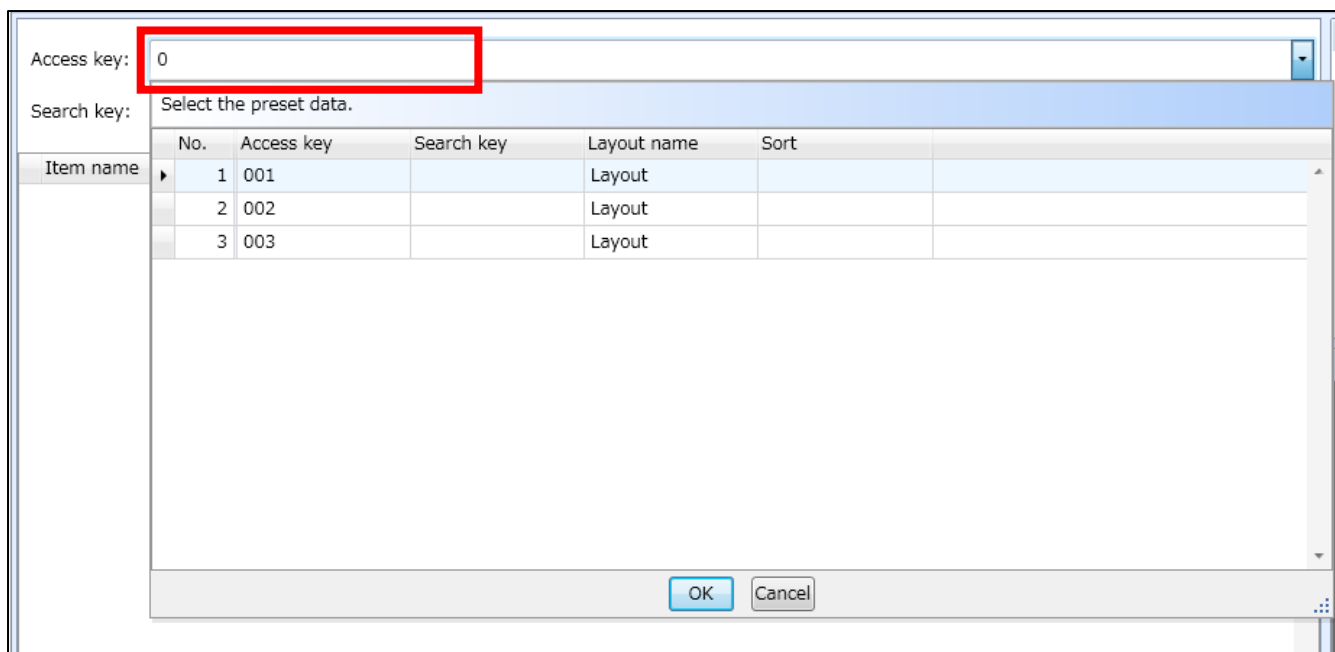
Select Windows Start Menu > All Programs > Multi LABELIST V5 > MLPreset >



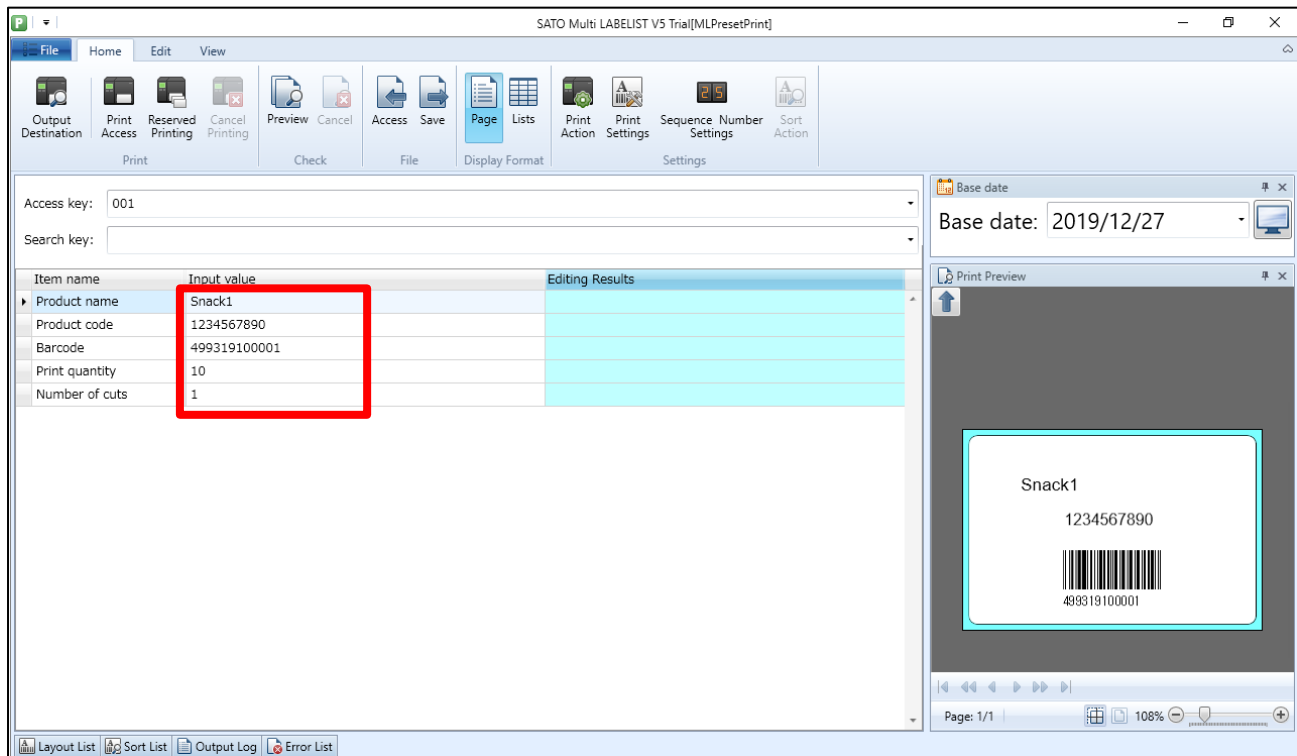
The MLPresetPrint screen appears.



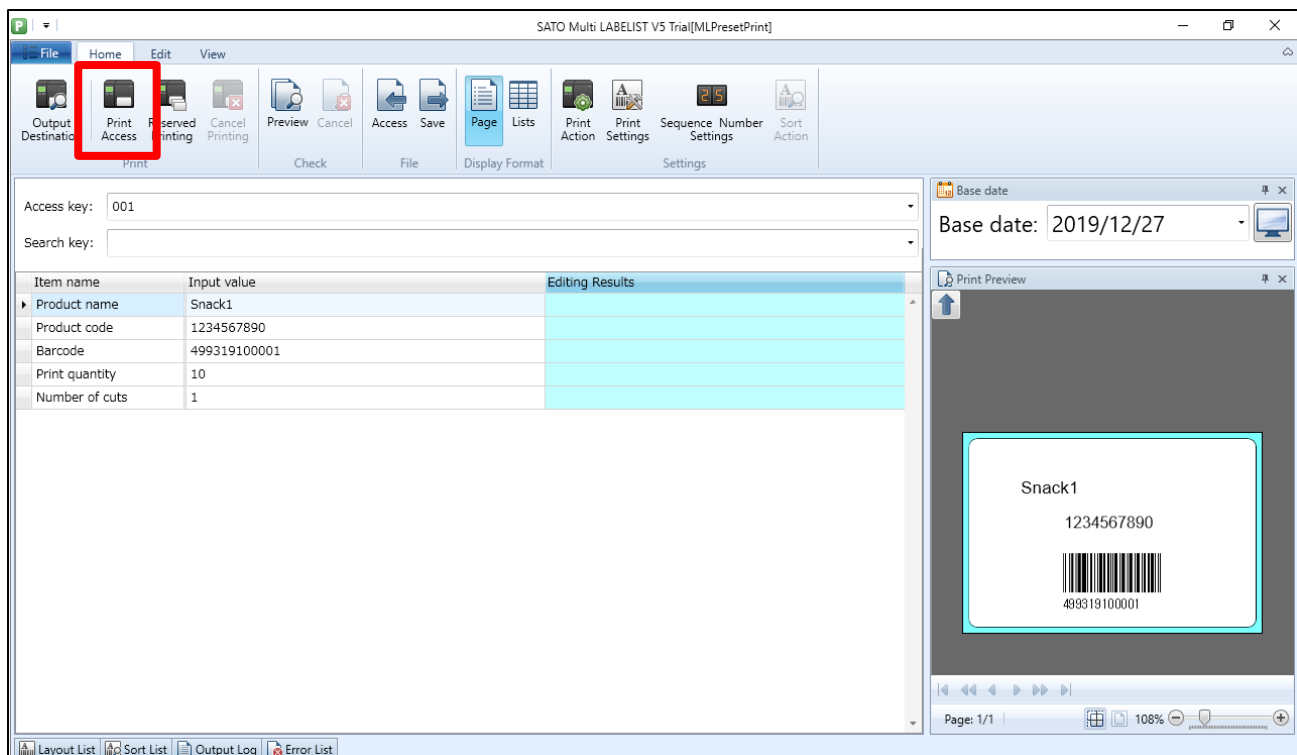
Enter “Access key” and the data filtered by the entered key are displayed on the list.
Using the pull-down button, the list can be displayed and the data can be selected.
Click “OK” to define the data to be accessed.



The corresponding data is accessed and displayed.



Click the “Print Access” button to print.



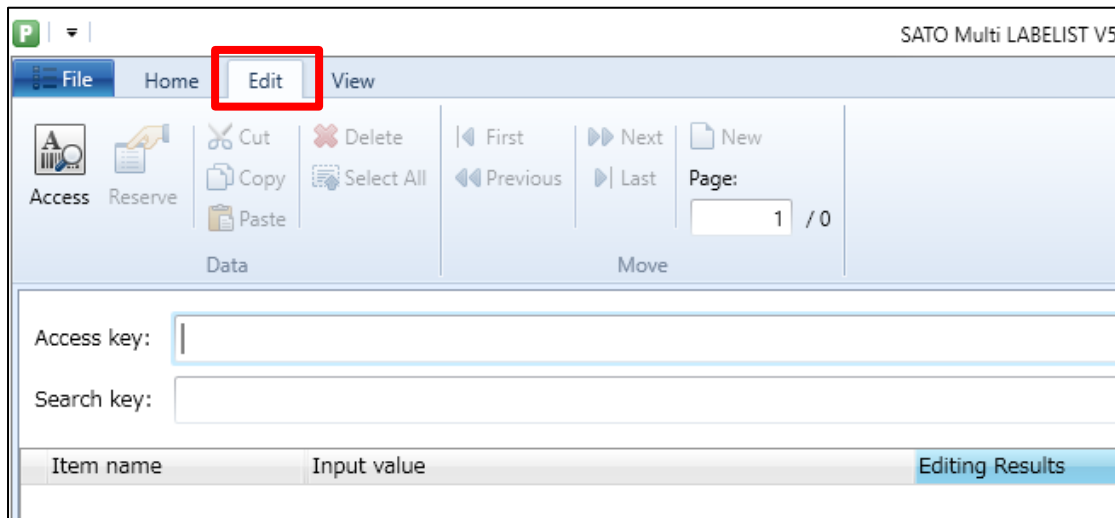
The above procedures are basic operations for preset print.

On the following pages, let's practice reserving the print data in advance and printing them.

4. Preset Reserved Printing

Access multiple print data and reserve them for printing together.

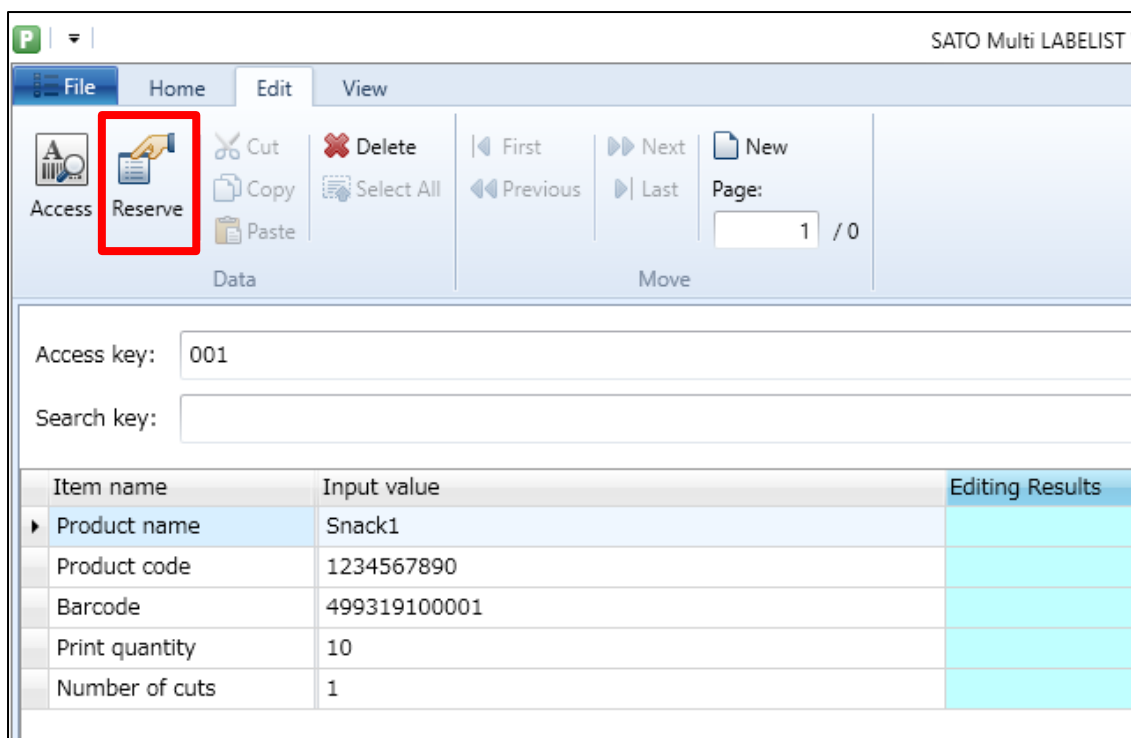
Click the "Edit" tab to switch the ribbon view.



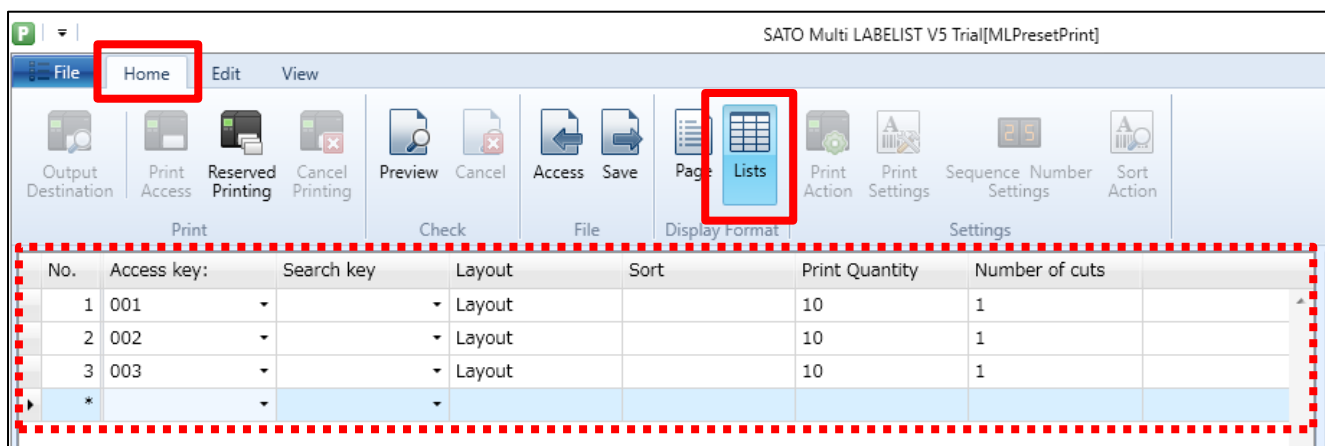
Enter the Access key to access the print data then click the "Reserve" button.

Repeat this operation to reserve data to be printed.

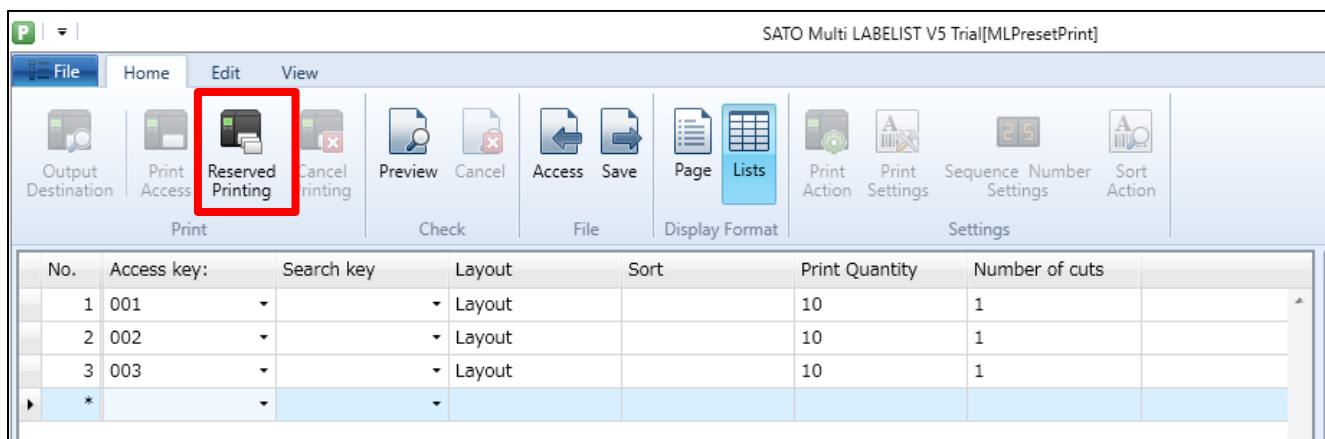
Then let's register several data.



Display the “Home” tab and click the “Lists” button. The list of reserved data is displayed. The reserved data can be checked. On the list, reserve data can be registered.



When reservation is complete, click the “Reserved Printing” button to print.



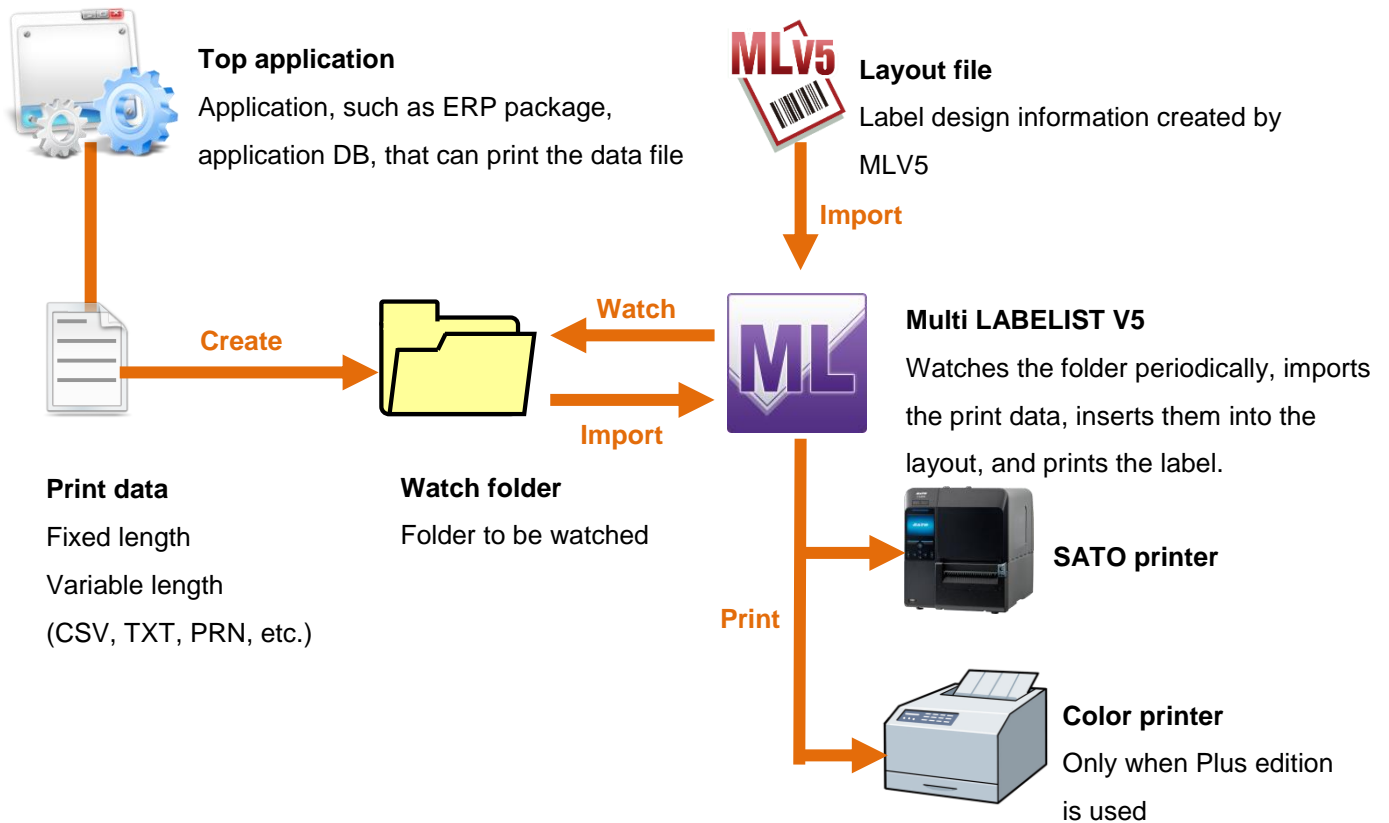
Did they print successfully?

This completes “[4: Preset Print](#)”.

5: Folder Watch Print

1. What is Folder Watch Print?

Folder Watch Print is a function to print data by placing the data file in a folder that the MLV5 is watching periodically. File format supports both fixed length and variable length (separation characters can be set arbitrarily).

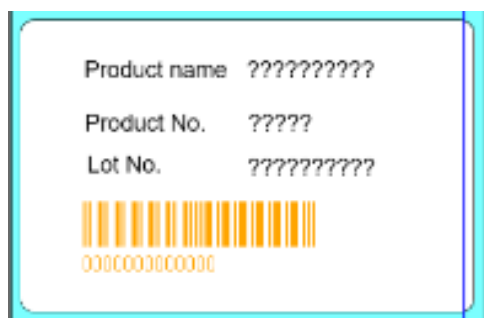


■ Preparations

Let's create two layouts as shown below, remembering the practice up to now.

- Printer model : CL4NX-J 08
- Paper : 45 mm x 70 mm (Length x Width)
- Layout name : Watch1.mllayx

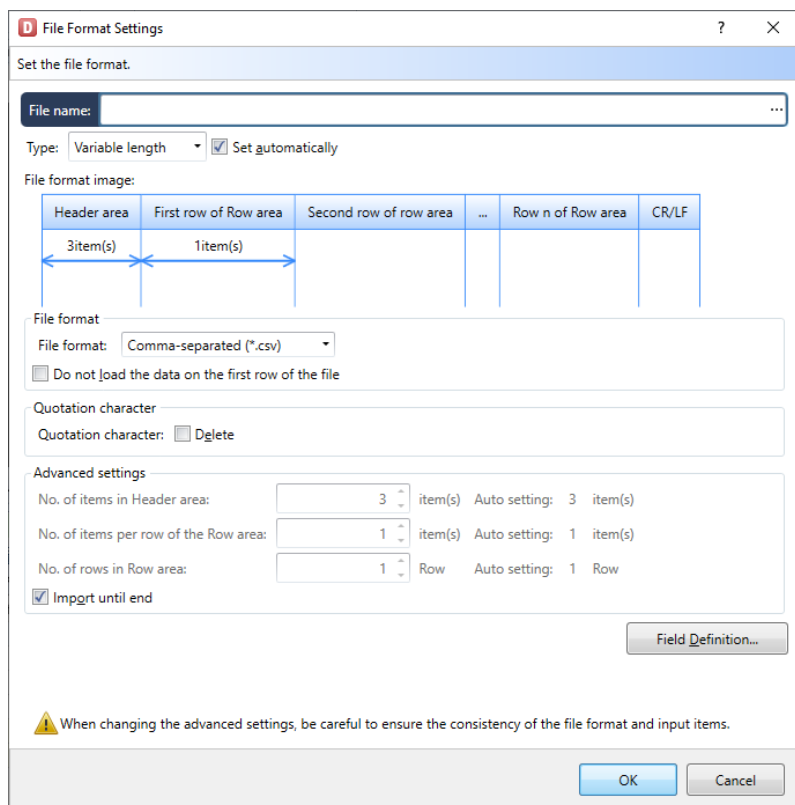
Design screen



Variable screen

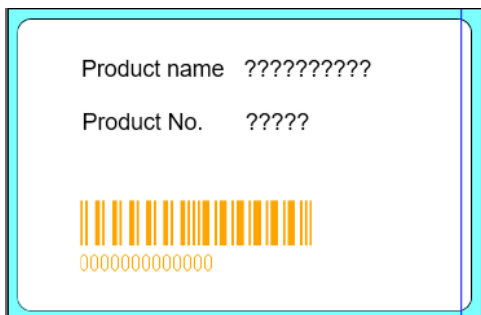
Local Variable List				
Variable name	Type	No. of digits	Details	
Product name	Input	10	Input type: Character	
Product No.	Input	5	Input type: Character	
Lot No.	Input	10	Input type: Character	
Barcode	Join	15	Remove specified character: No, Justification: No...	
Product No.	Input	5	Input type: Character	
Lot No.	Input	10	Input type: Character	

File format ([Refer to File Printing](#))

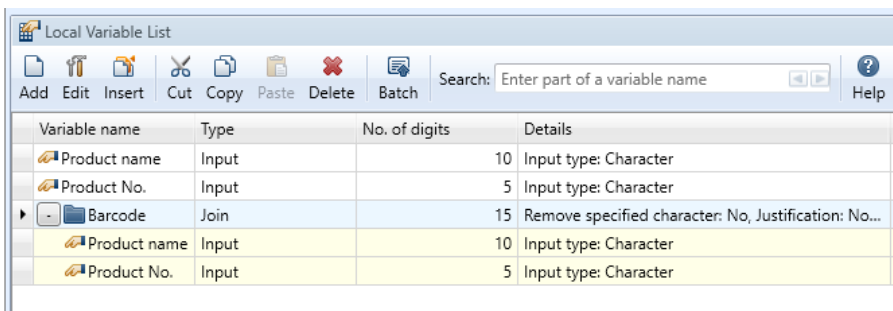


Printer model : CL4NX-J 08
 Paper : 45 mm x 70 mm (Length x Width)
 Layout name : Watch2.mllayx

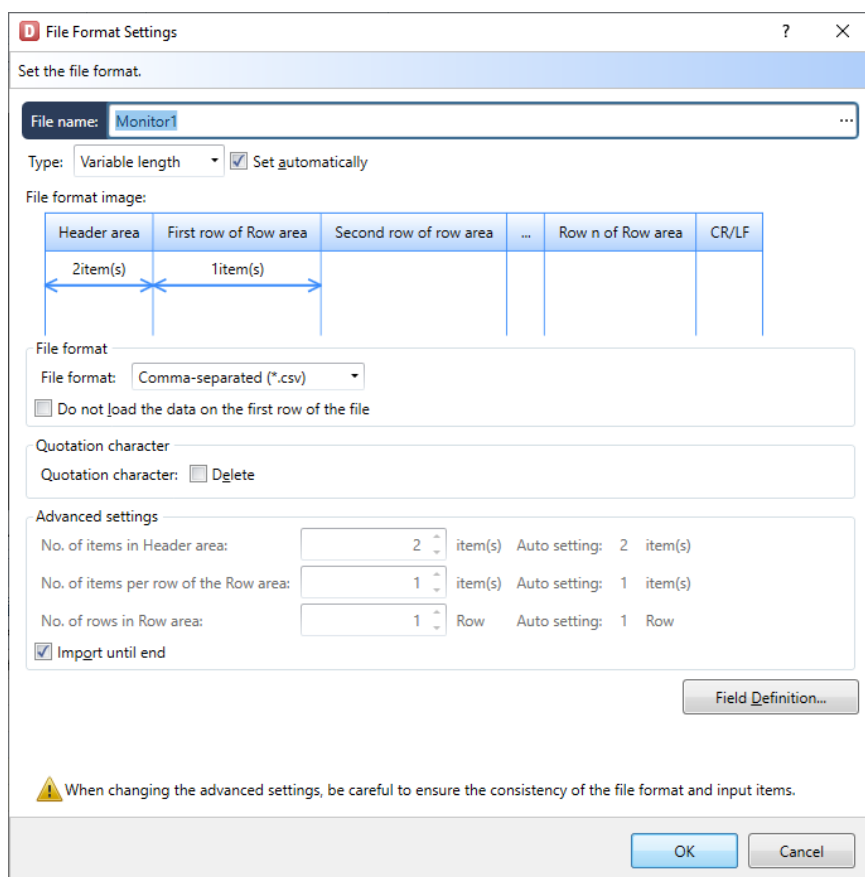
Design screen



Variables screen



File format ([Refer to File Printing](#))



Could you make the layouts?

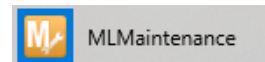
Then set the folder watch.

2. Setting the Folder Watch

As the basic operations of Folder Watch Print, make watch settings and print under the conditions below.

Watch folder : C:¥sato¥watch
 Layout : Watch1.mllayx
 Data file : data1.csv
 Output destination : SATO Lesprit408v

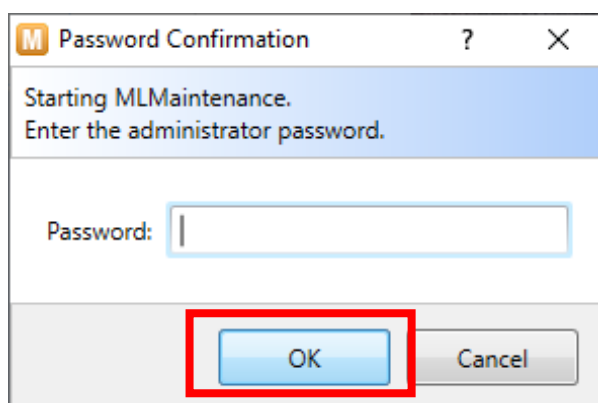
Select Windows Start Menu > All Programs > Multi LABELIST V5



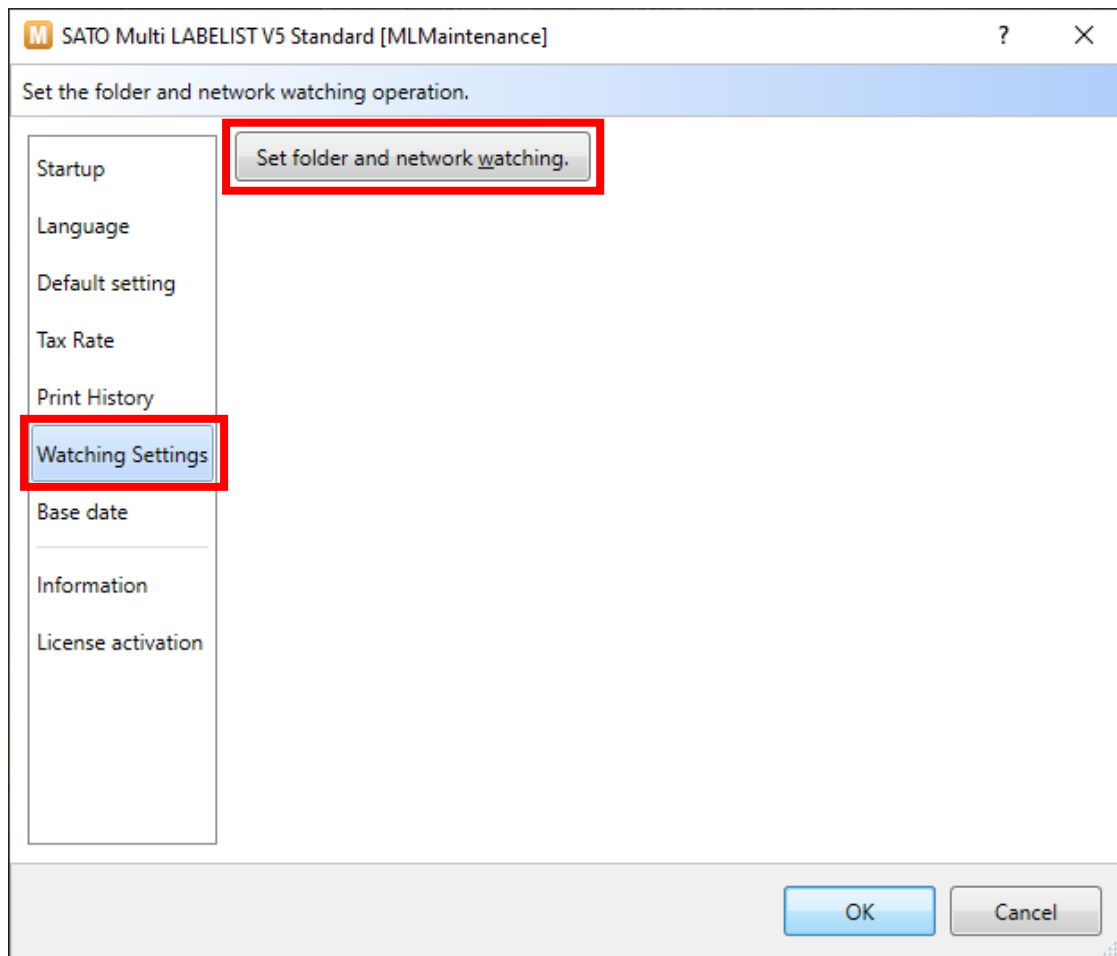
Click "Yes" on the User Account Control screen.



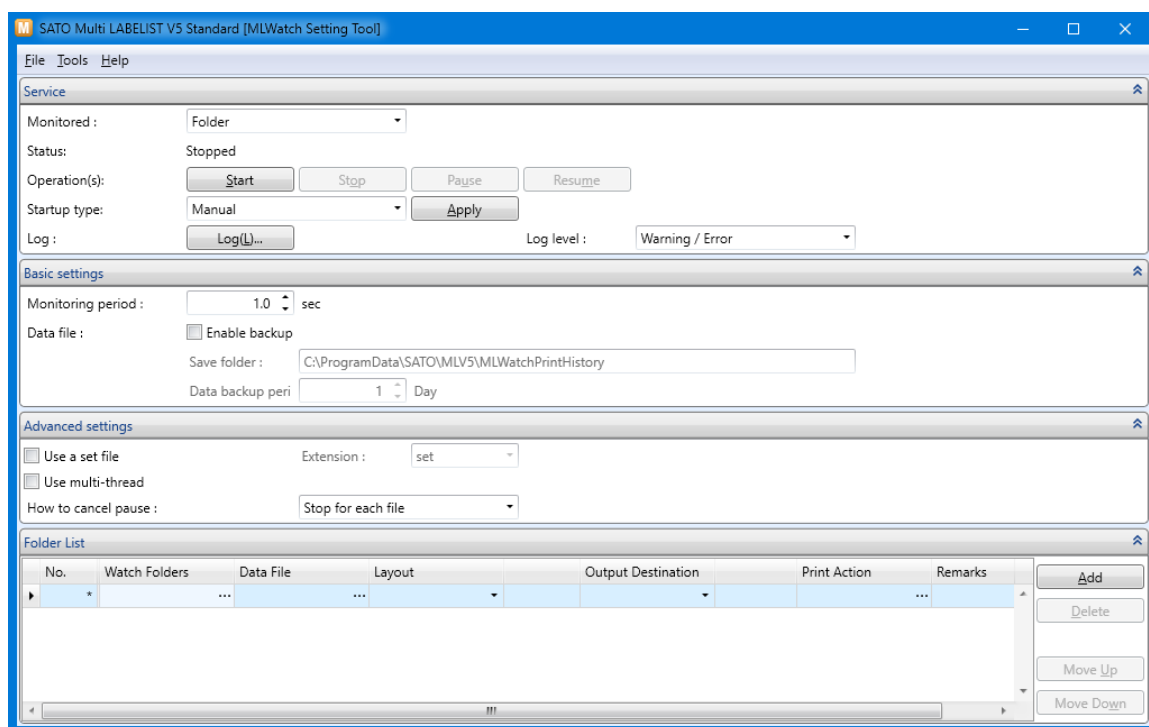
Enter your password.



Select “Watching Settings” from the menu on the left and click “Set folder and network watching.”



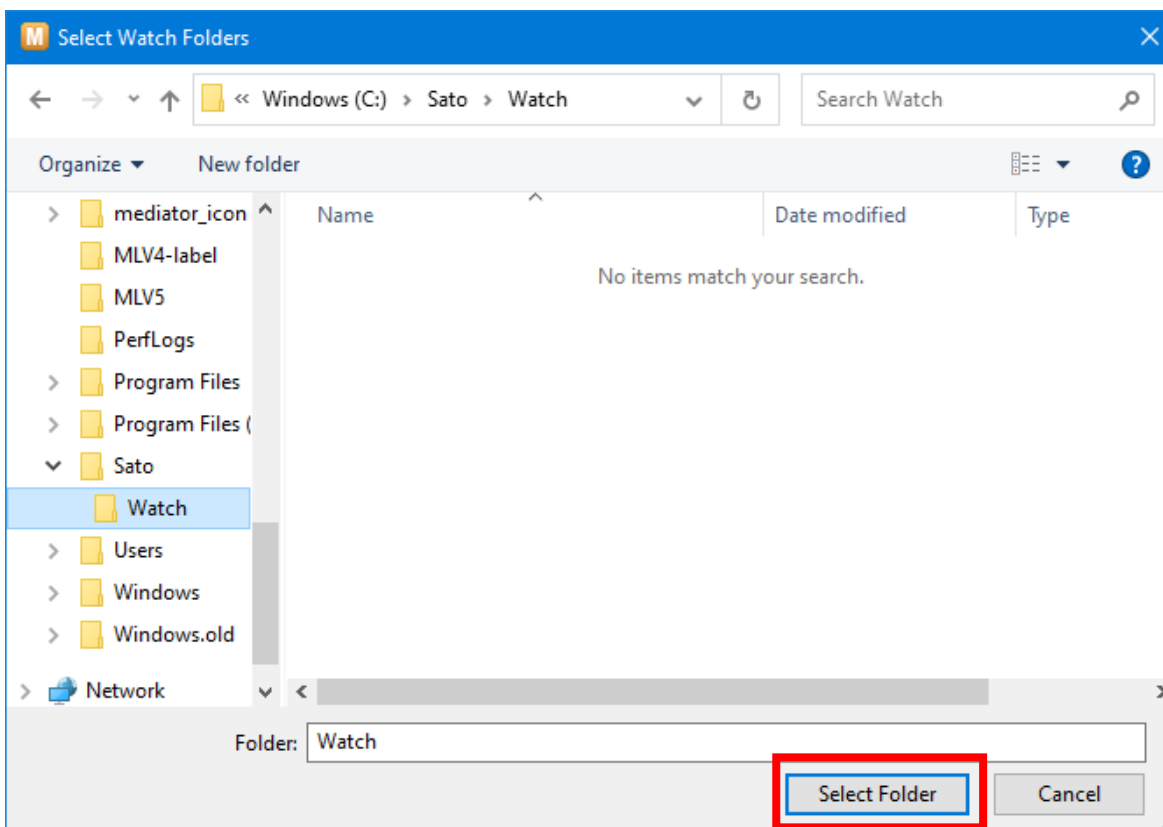
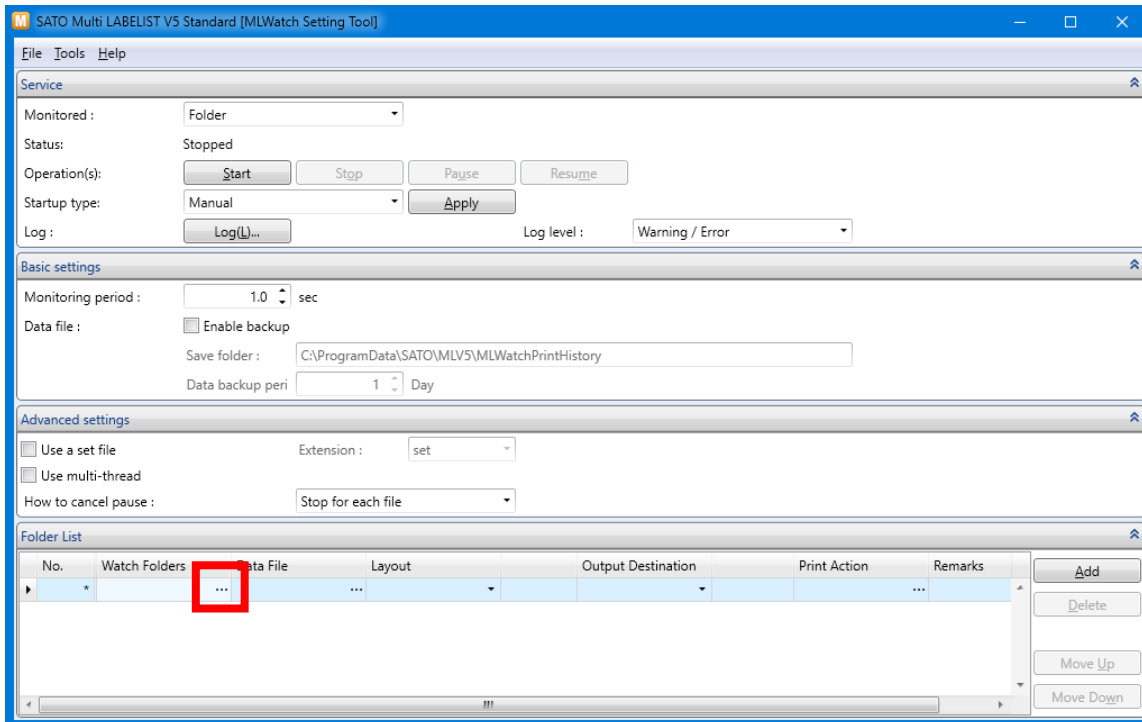
Watching Settings (MLWatch Setting Tool) starts.



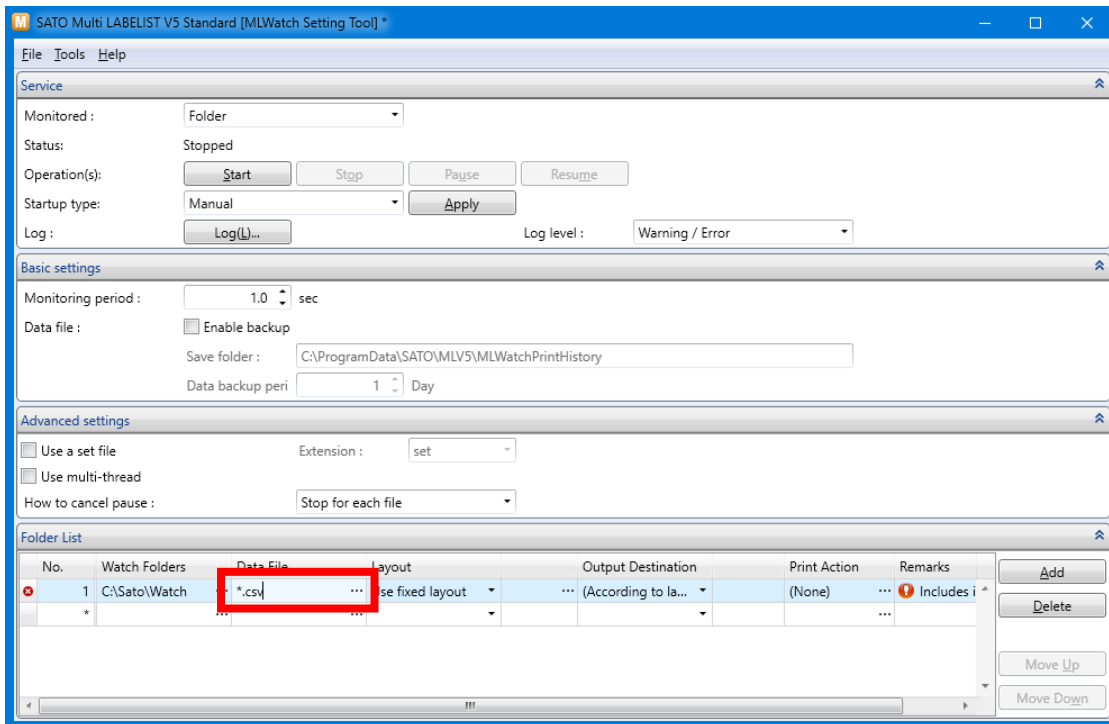
Then let's make folder watching settings.

Select a watch folder.

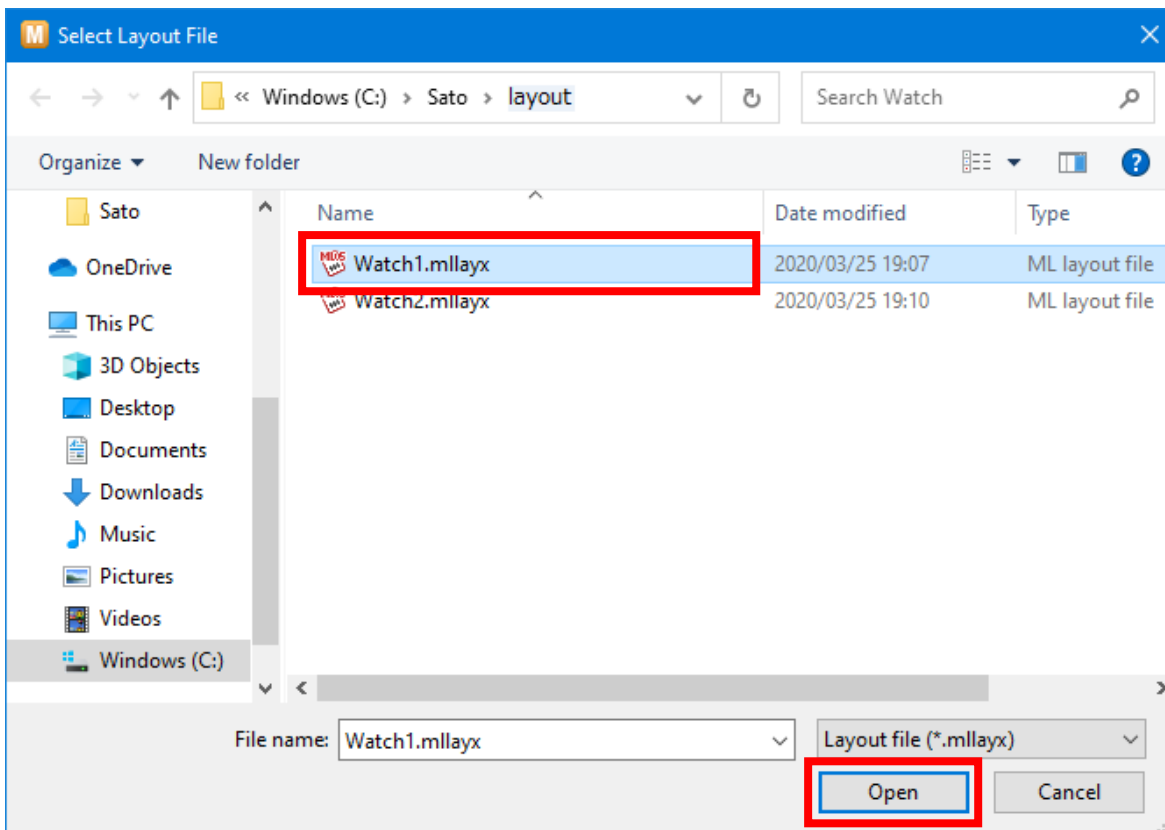
- * Do not set a folder on the network (shared folder starting with \\ or mapped network drive, etc.) to the watch folder. An unexpected trouble may occur on watching folder or printing label.

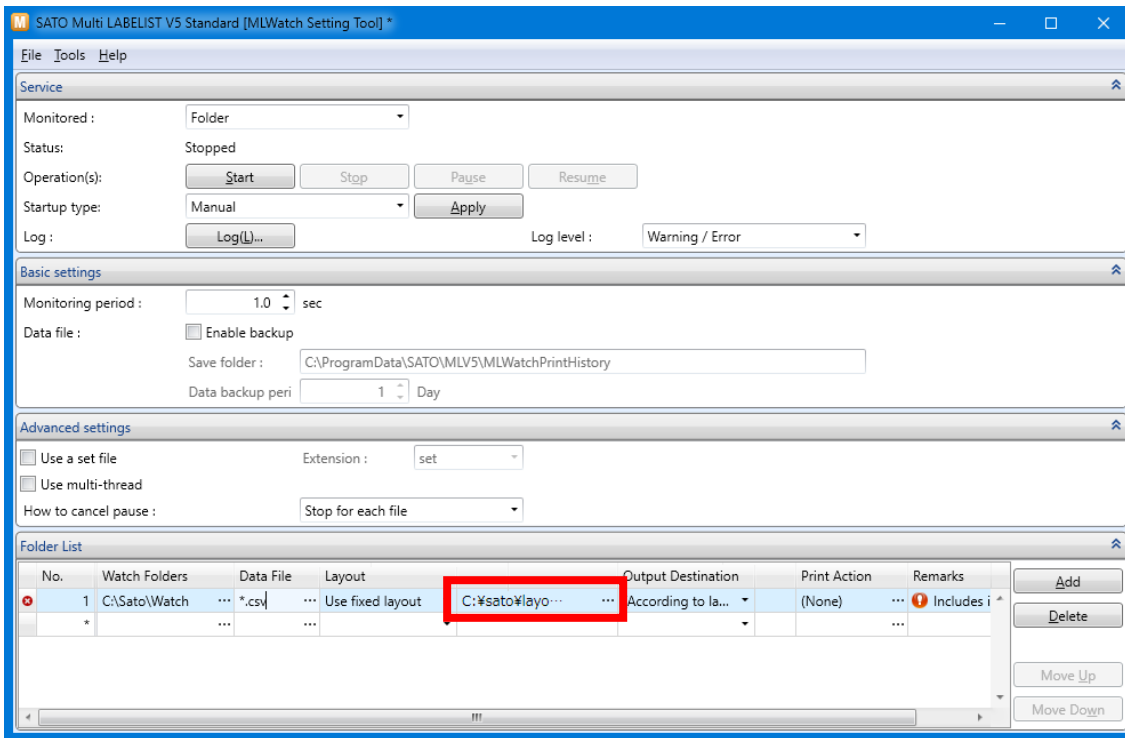


Enter “*.csv” in Data File to be watched.

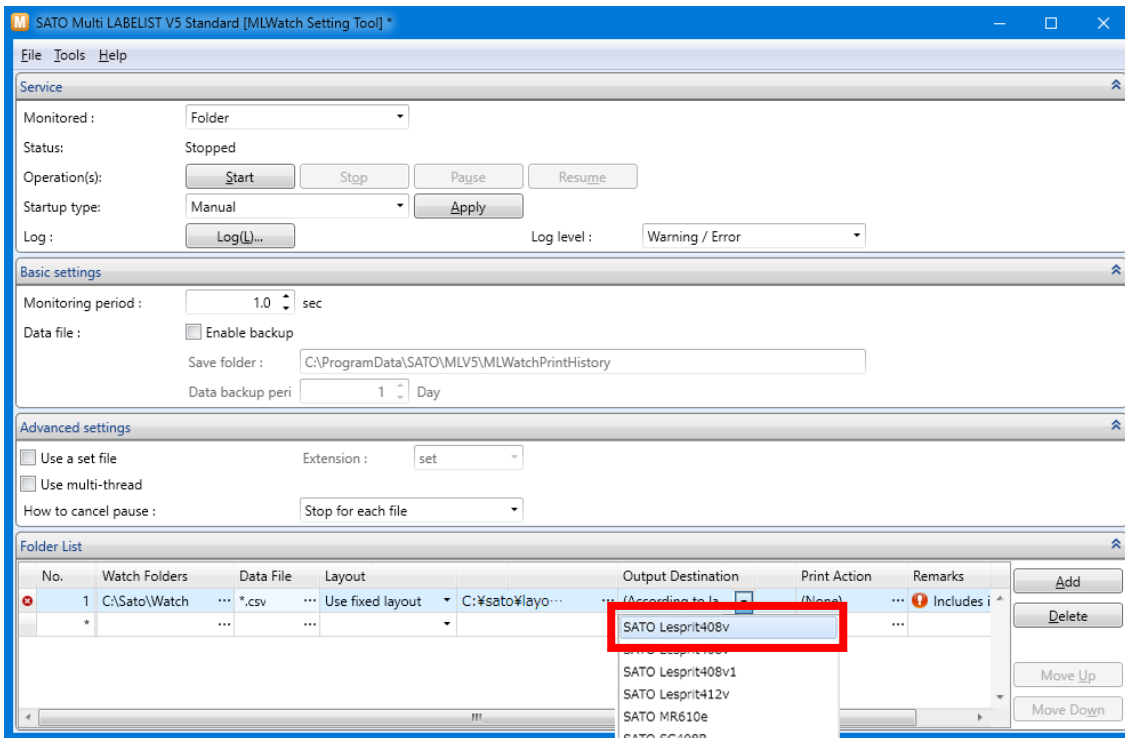


Select a layout.

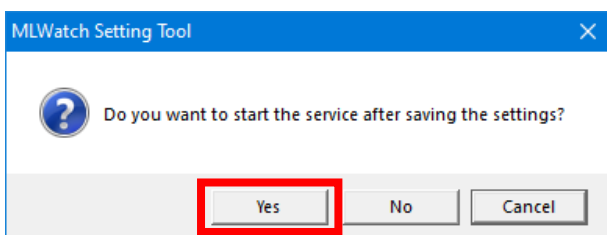
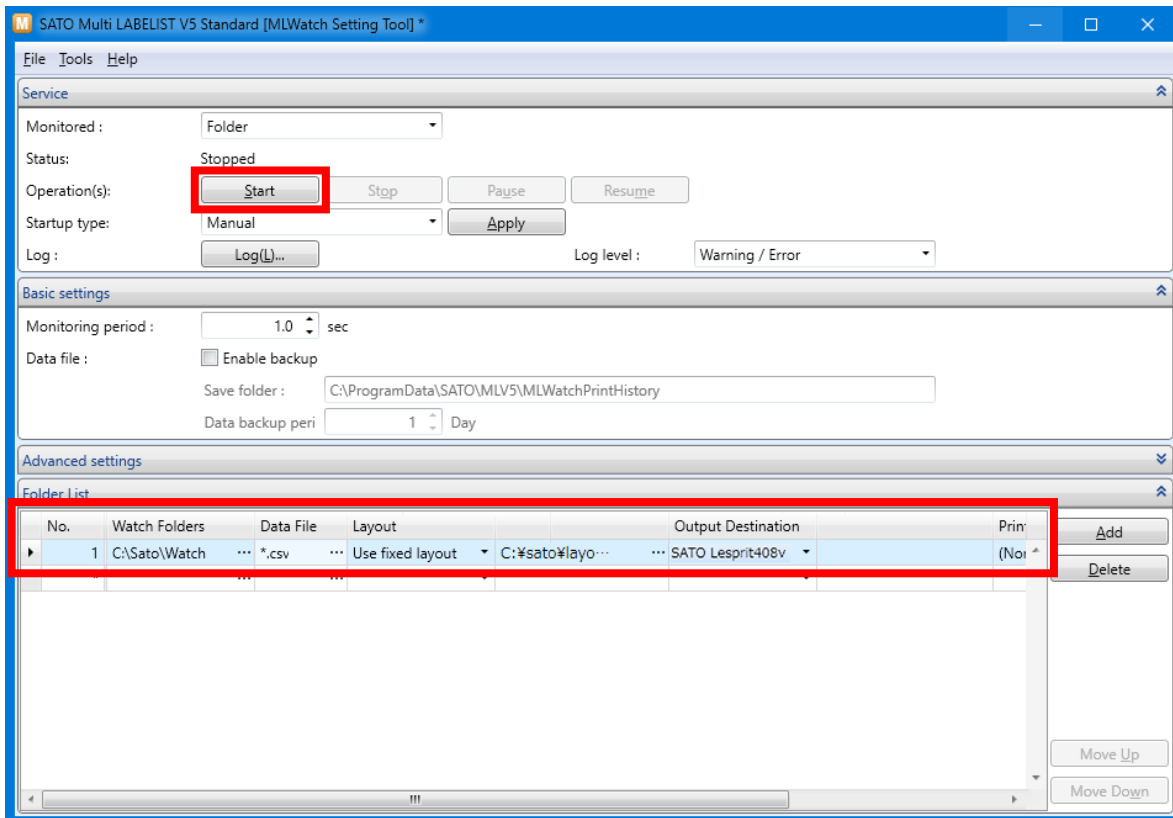




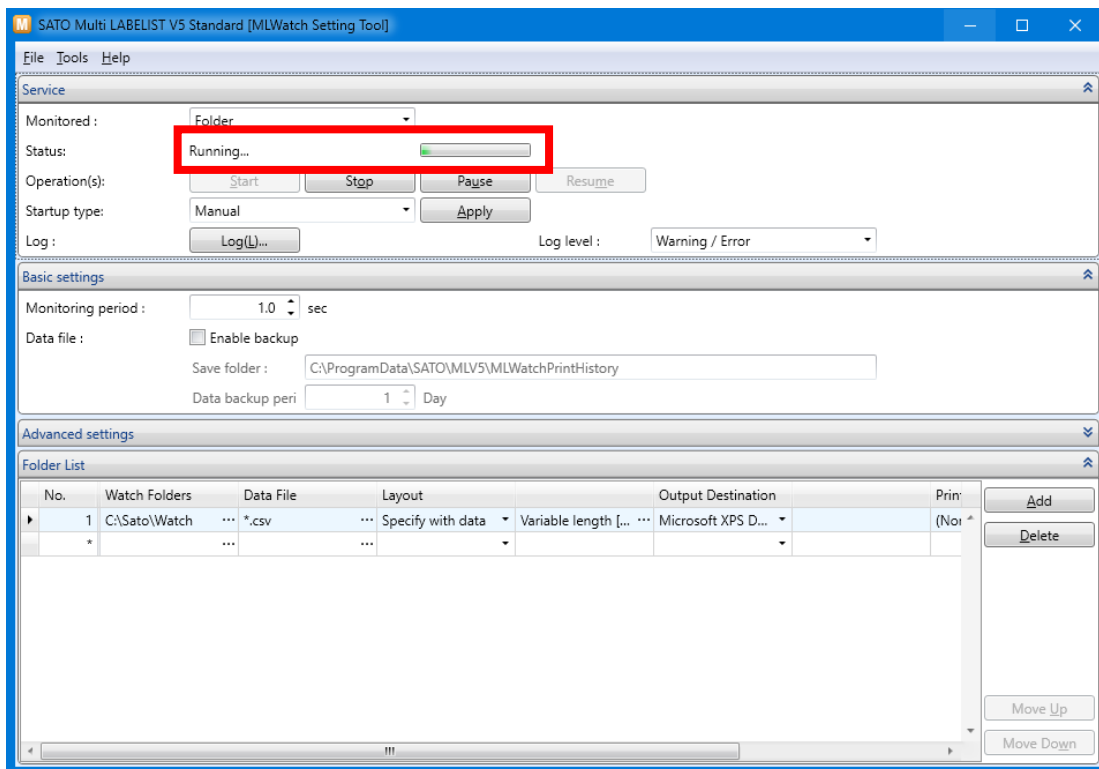
Select an Output Destination.



Check that no error is displayed on the Folder List and click “Start” in Service.



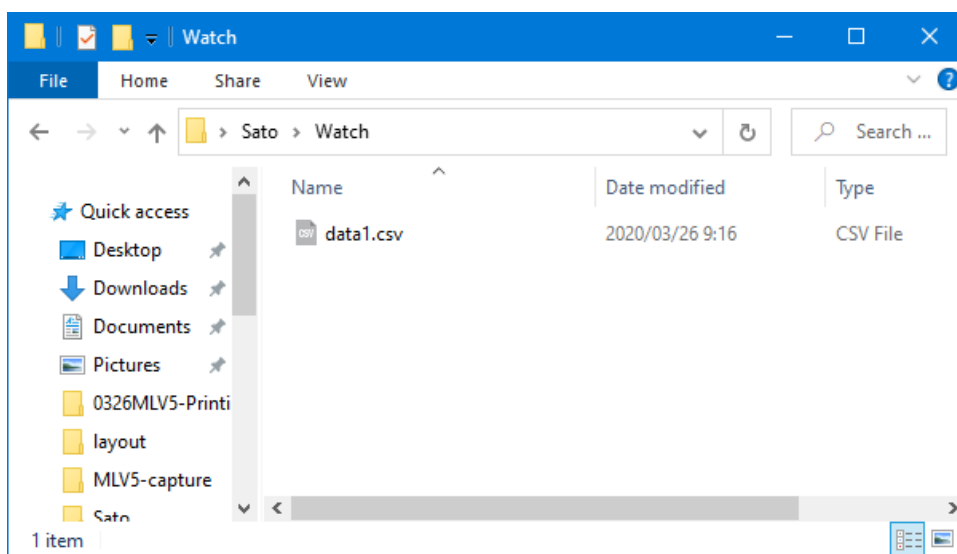
When the status shows Executing, watching folder action works normally.



Place the data file in the Watch folder and print them.

Data file: data1.csv

```
1234567890,00001,AAAAAAAAAA,1
1234567890,00001,BBBBBBBBBB,1
1234567890,00001,CCCCCCCCC,1
```



The above procedures are basic operations for Folder Watch Print.

On the following pages, let's practice how to specify the layout or output destination by data.

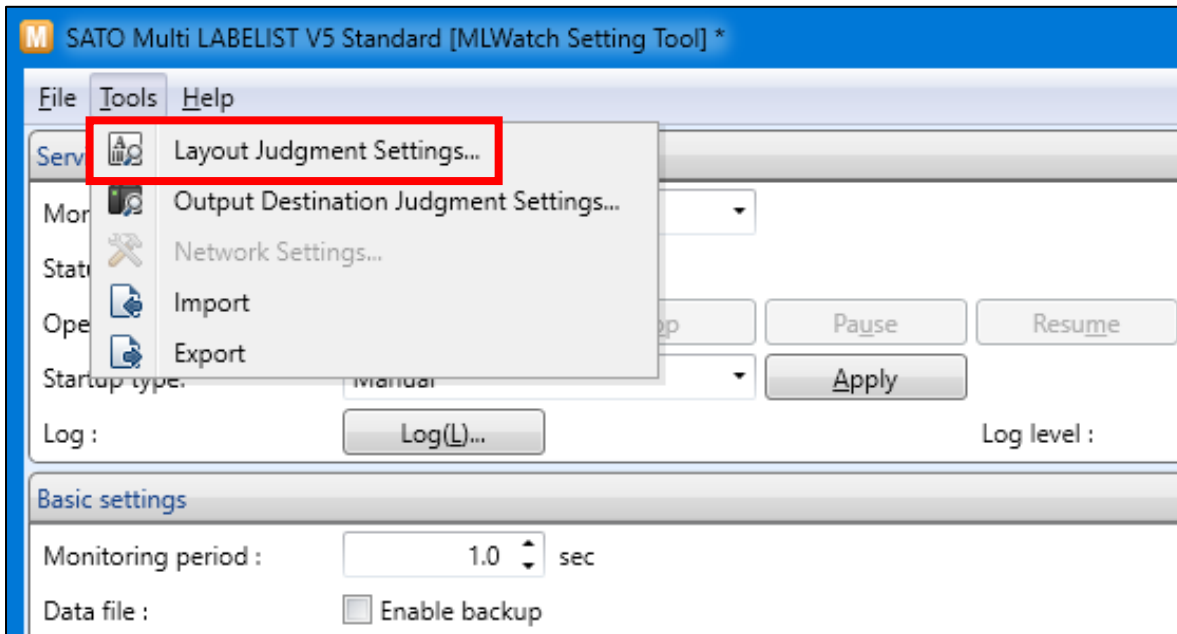
3. Specifying Data of Layout

A layout to be printed is changed from the fixed layout to that specified by a data file.

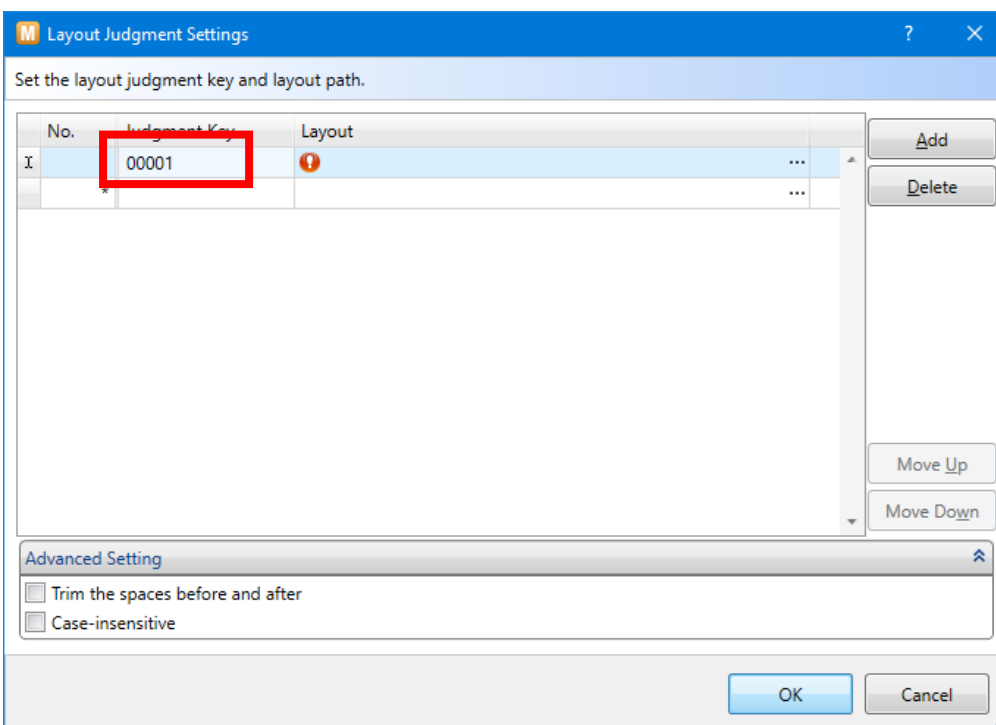
For example, make settings for printing “Watch1.mllayx” when “Product number” is “00001” and “Watch2.mllayx” when “Product number” is “00002”.

First set the layout to be used and the data to be connected (Judge key).

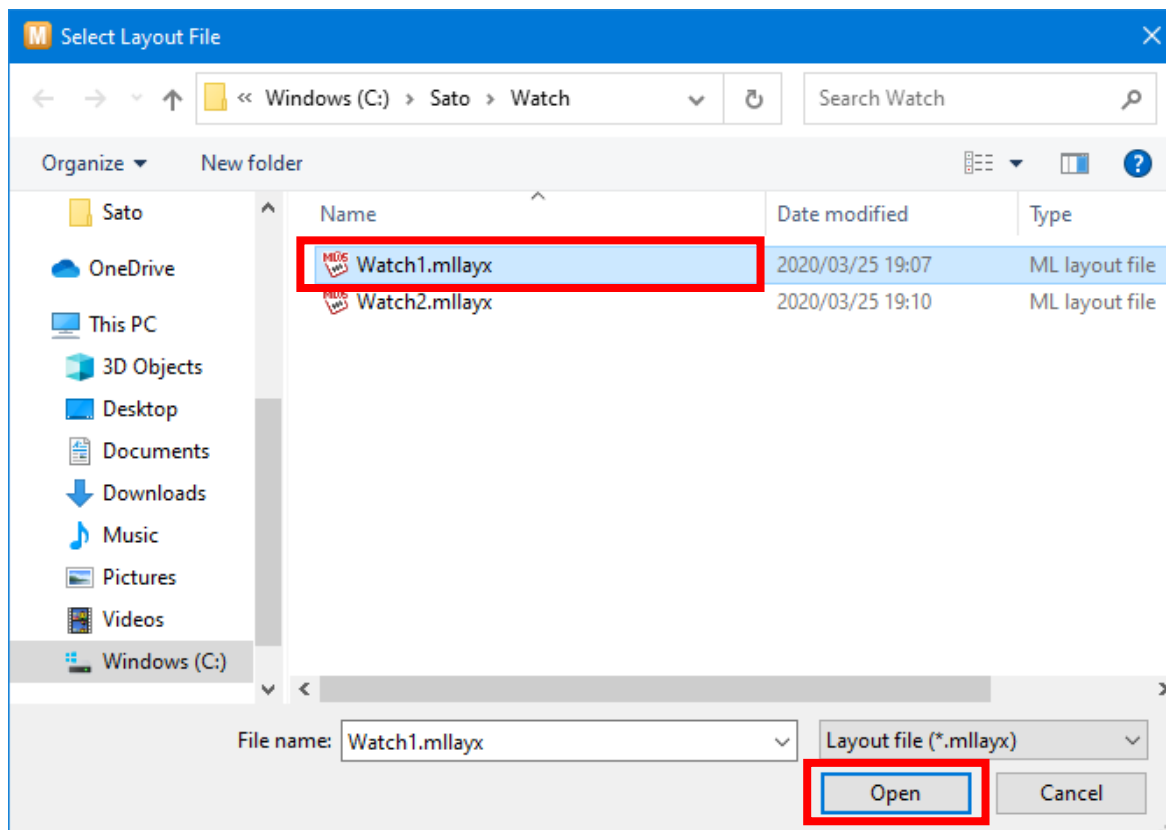
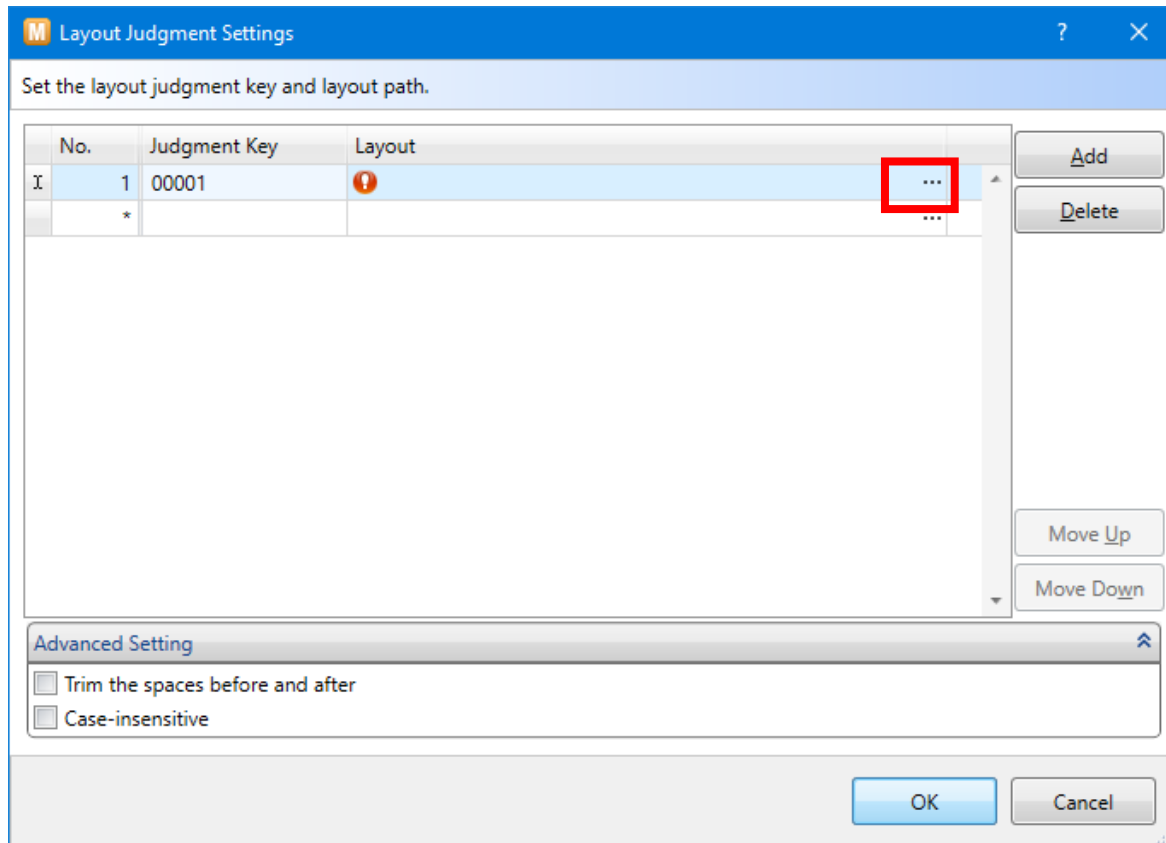
Select “Judge layout Settings” from the Tool menu.



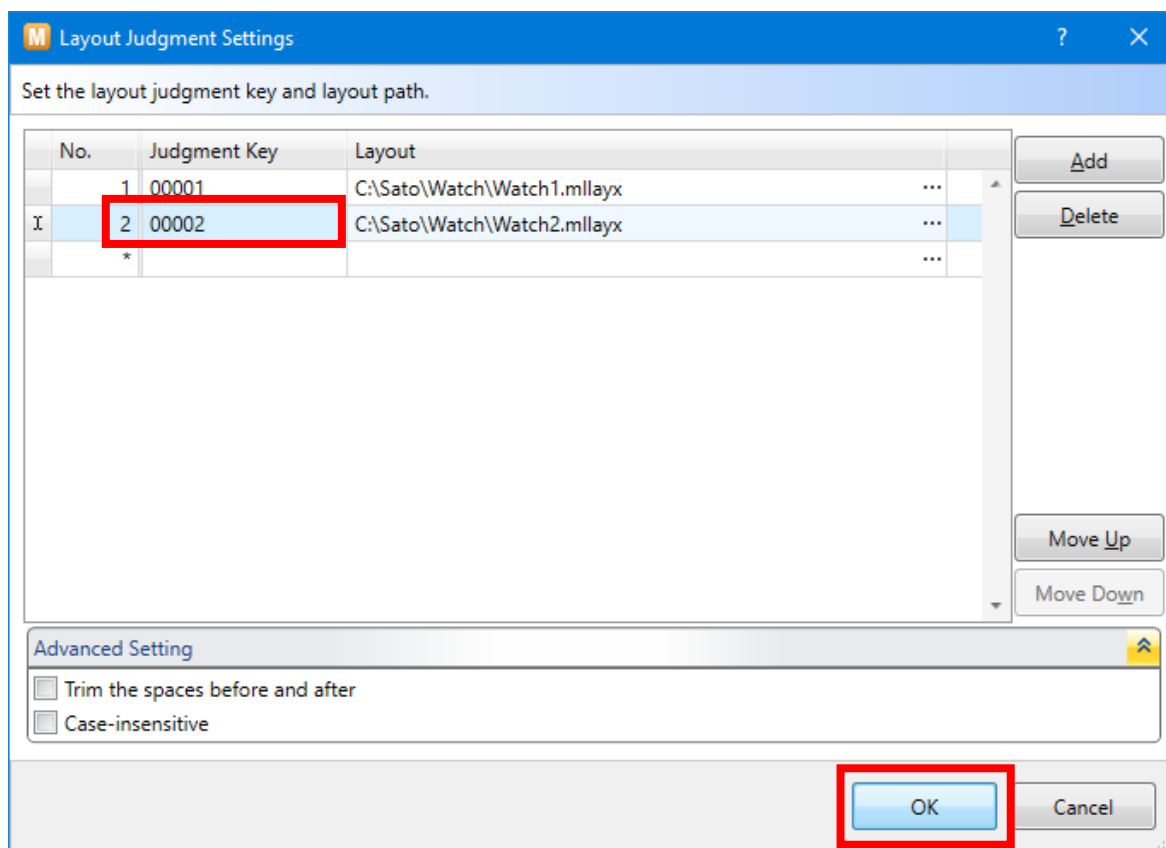
Enter “00001” in Judge key.



Select a layout “Watch1.mllayx”.

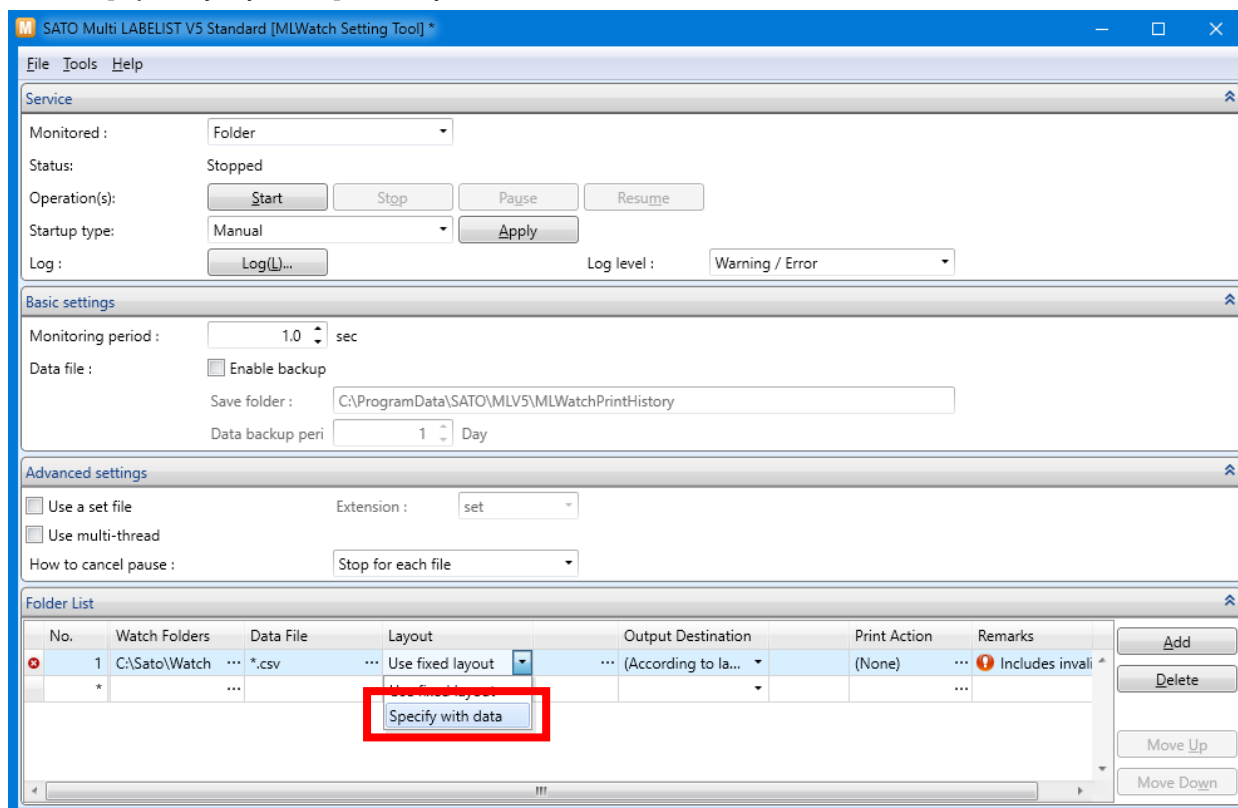


In the same way, set Judge key “00002” and layout “Watch2.mllayx” and click “OK”.

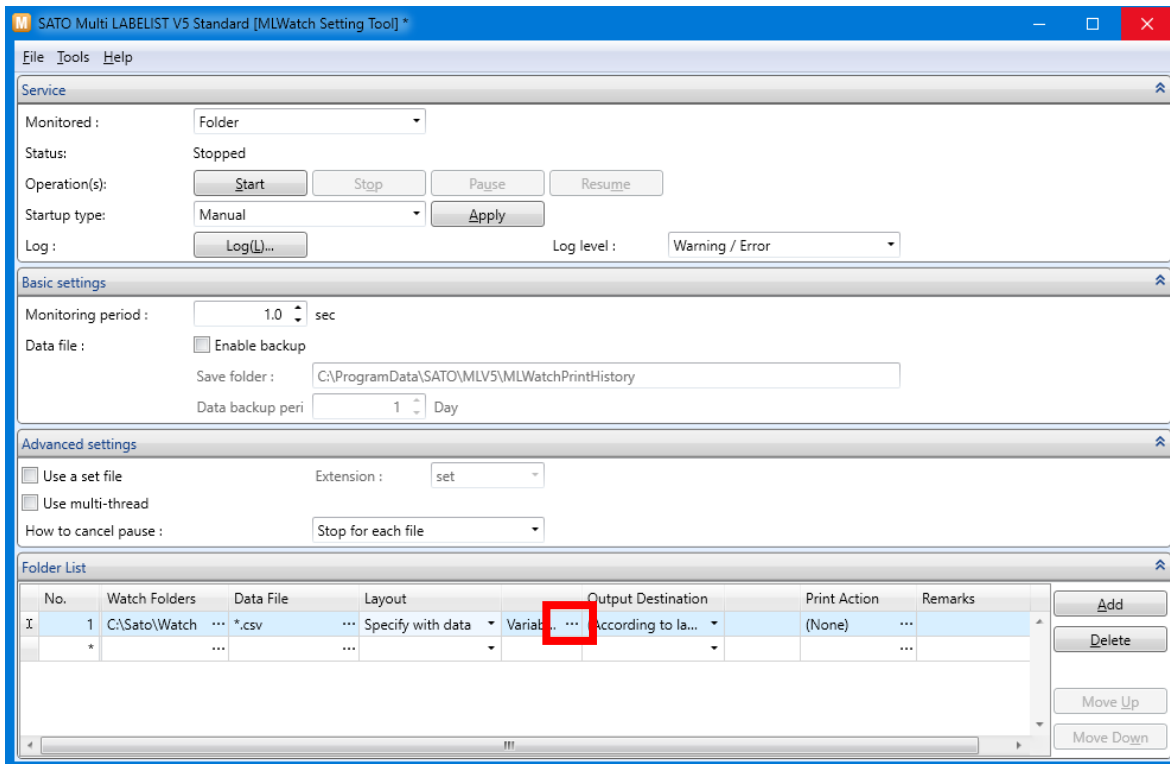


Then set the watch method.

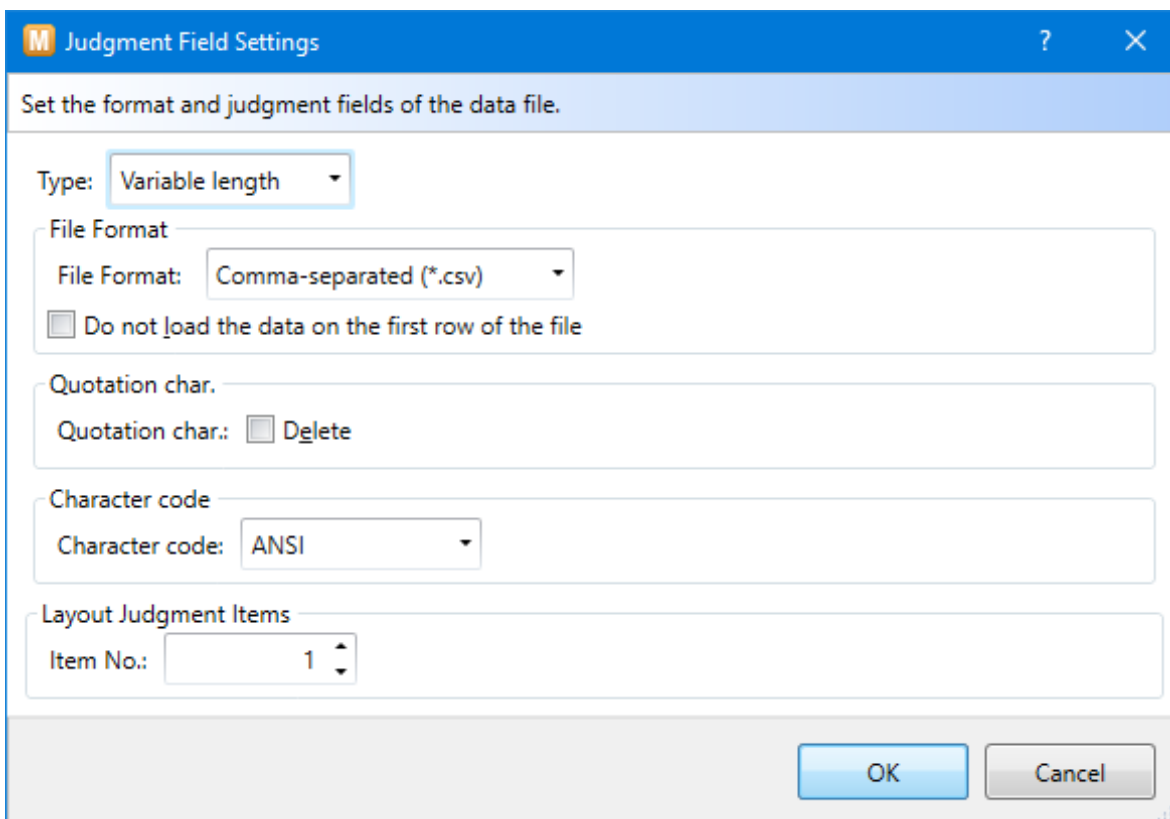
Select [Specify by data] for Layout.



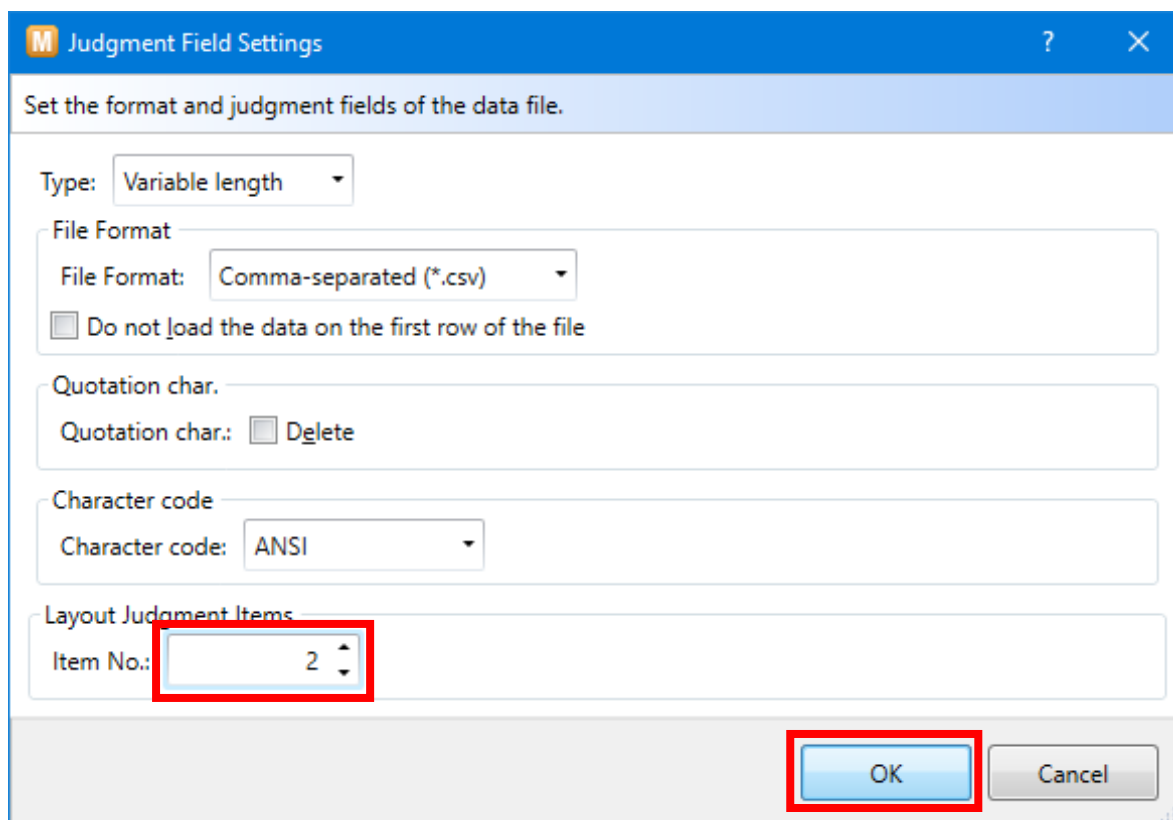
Click "...".



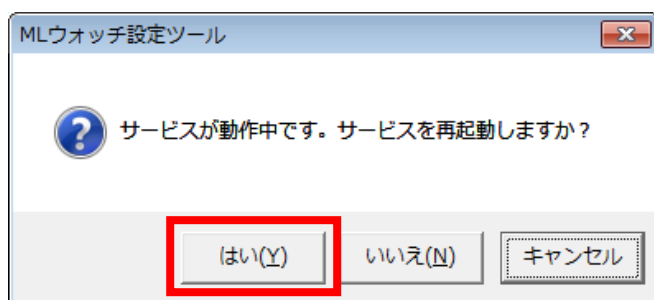
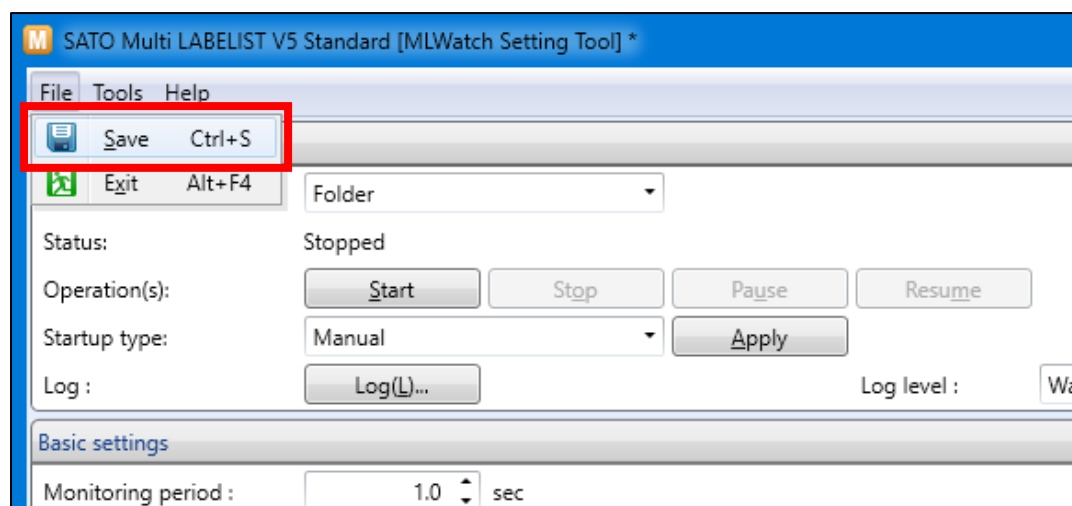
The Judge Field Settings are displayed.



Set “2” in Judge layout Item and click “OK”.
 (The layout is judged by the second item in the data file.)



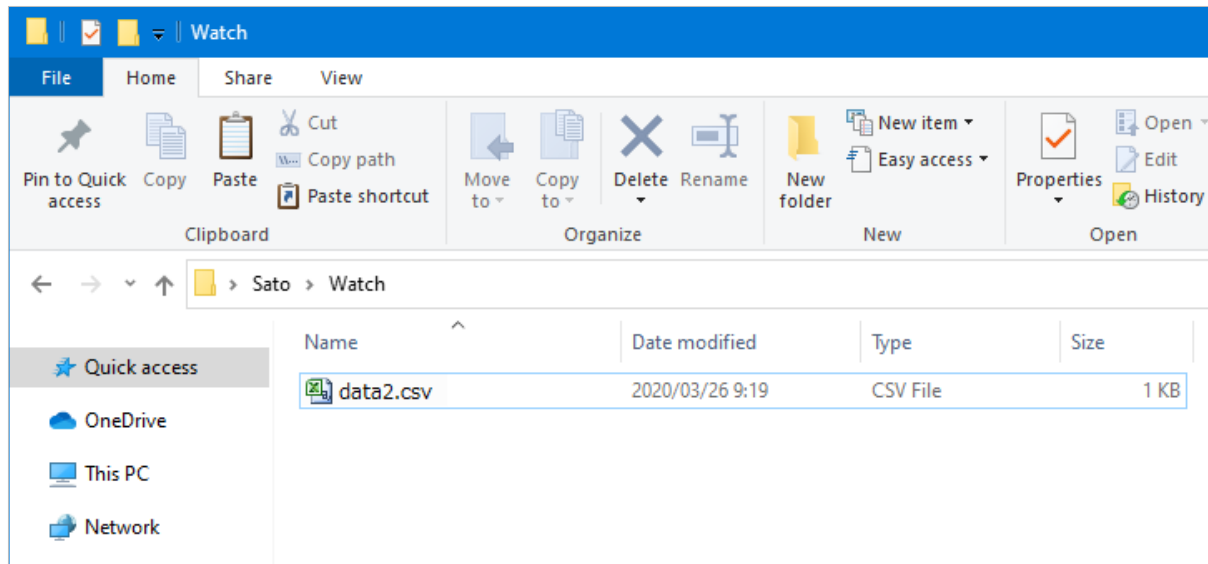
Select “Save” from the File menu to restart the service.



Place the data file in the Watch folder and print them.

Data file: data2.csv

```
1234567890,00001,AAAAAAAAAA,1
9999999999,00002,1
1234567890,00001,CCCCCCCCCC,1
```



The procedures complete when Layout “Watch1.mlayx” and “Watch2.mlayx” are printed.



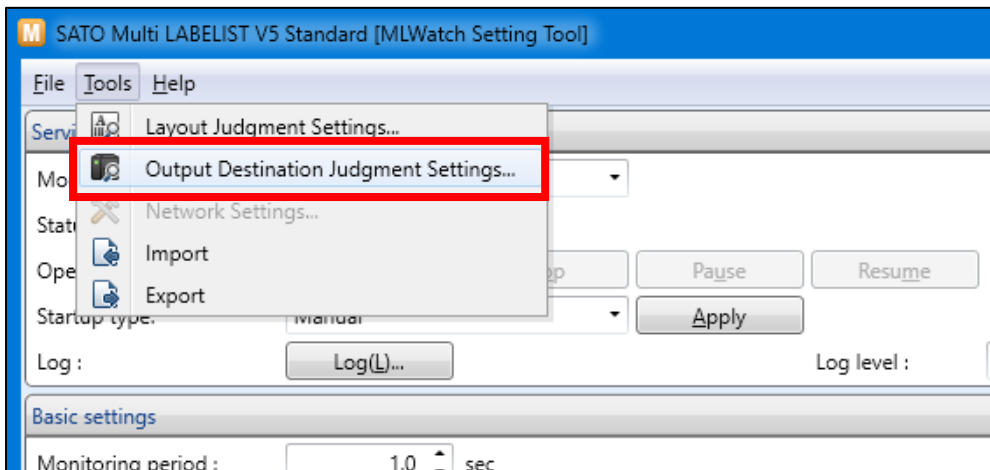
4. Specifying an Output Destination by Data

An output destination can be changed from the fixed printer driver to the method specified by a data file.

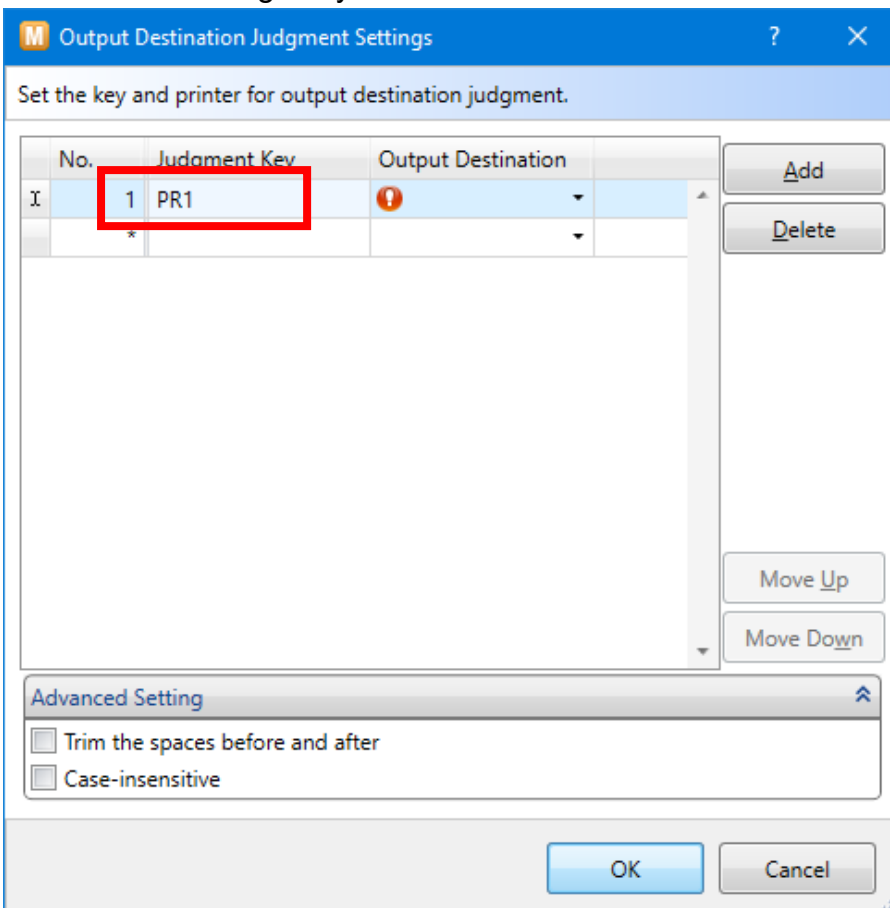
For example, set up a new item for a data file [Printer Judge Number] and make settings for the method to print with "SATO Lesprit408v" for "PR1" and "SATO Lesprit408v (1 copy)" for "PR2".

First set the data to be connected to the printer driver used as the output destination (Judge key).

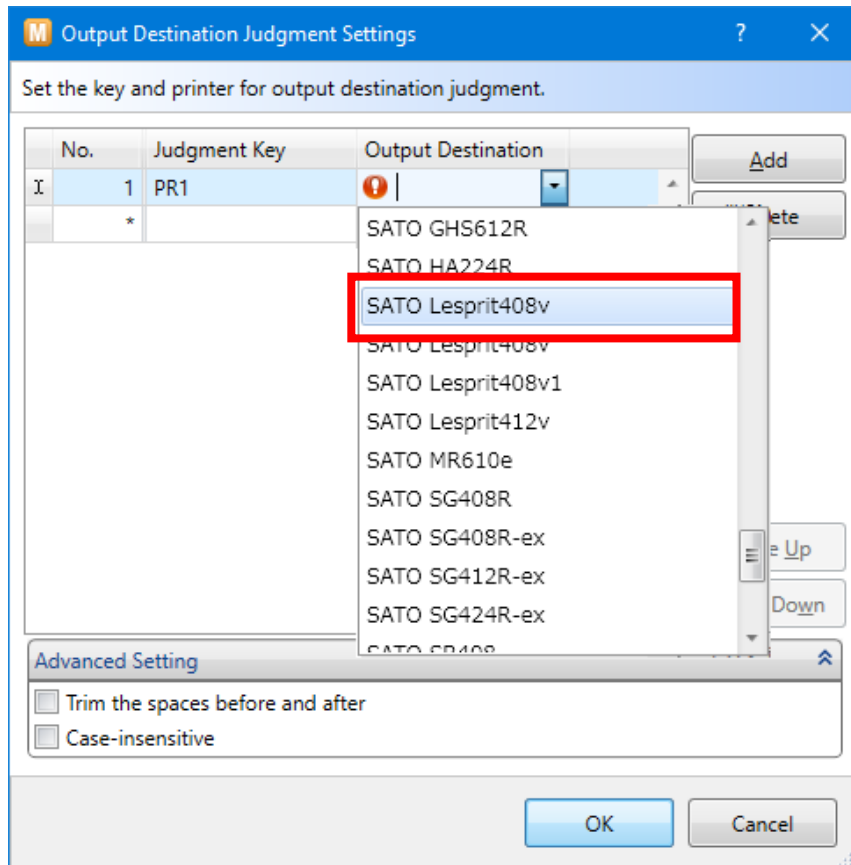
Select [Output Destination Judgment Settings] from the Tool menu.



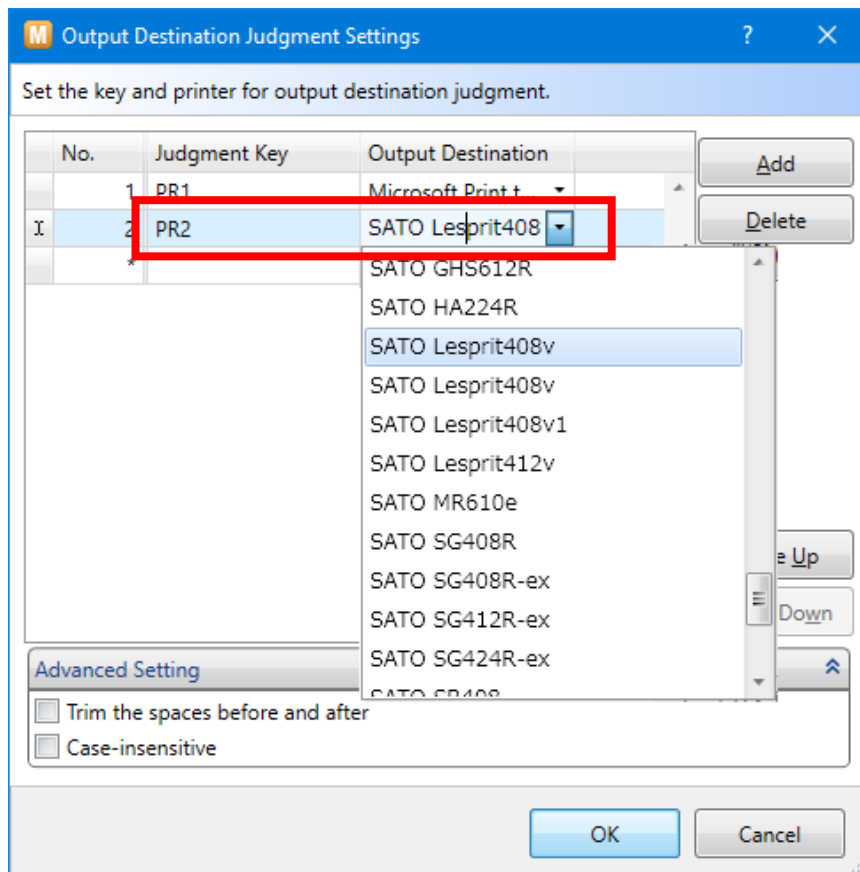
Enter "PR1" in Judge key.



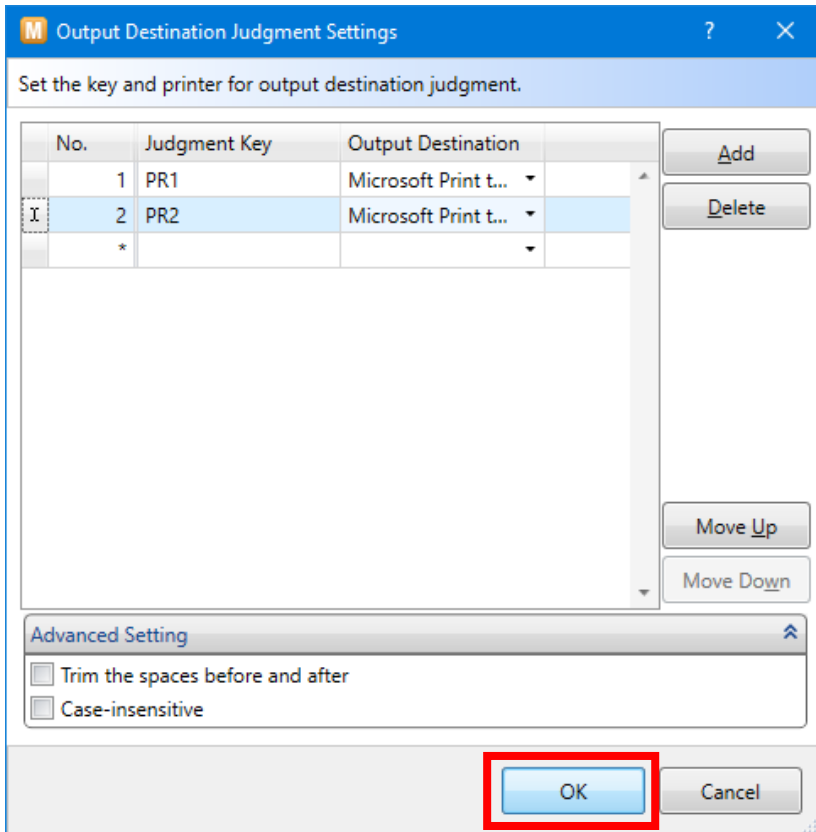
Select an Output Destination.



Set the judge key "PR2" and the output destination in the same way.

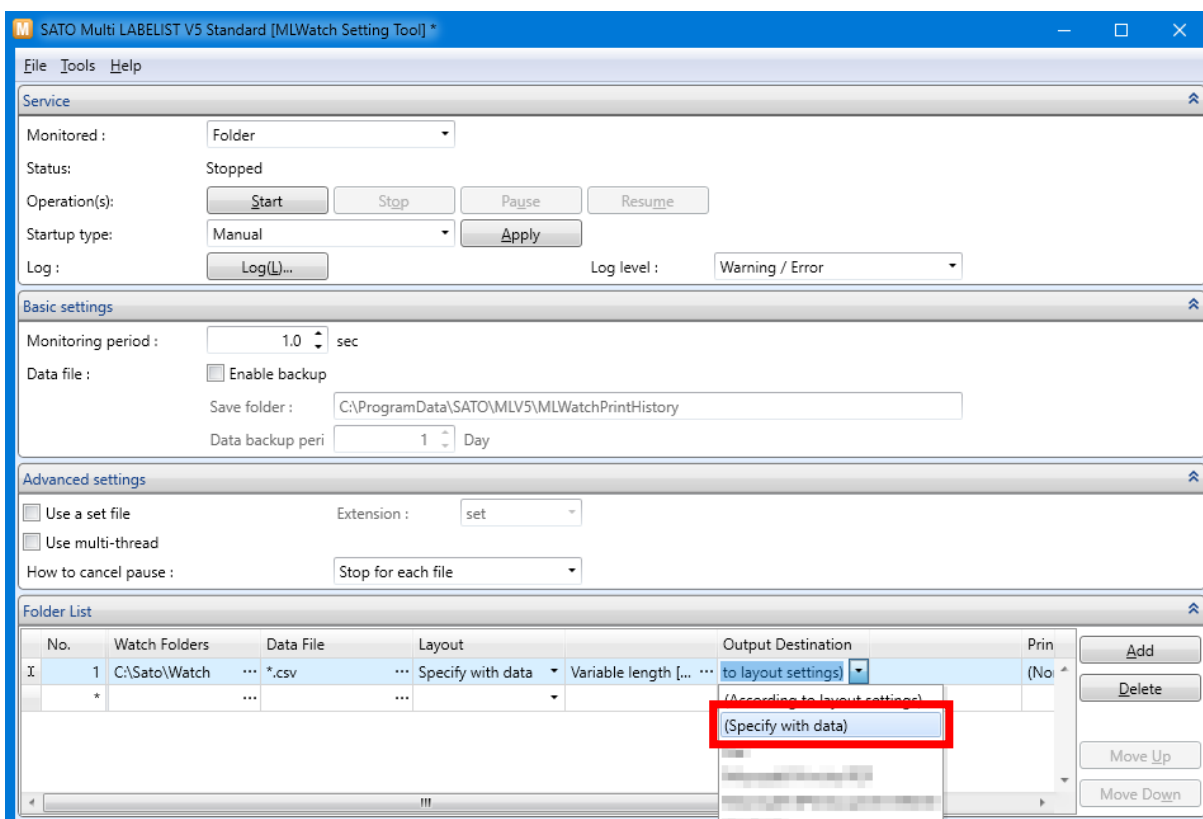


Click "OK".

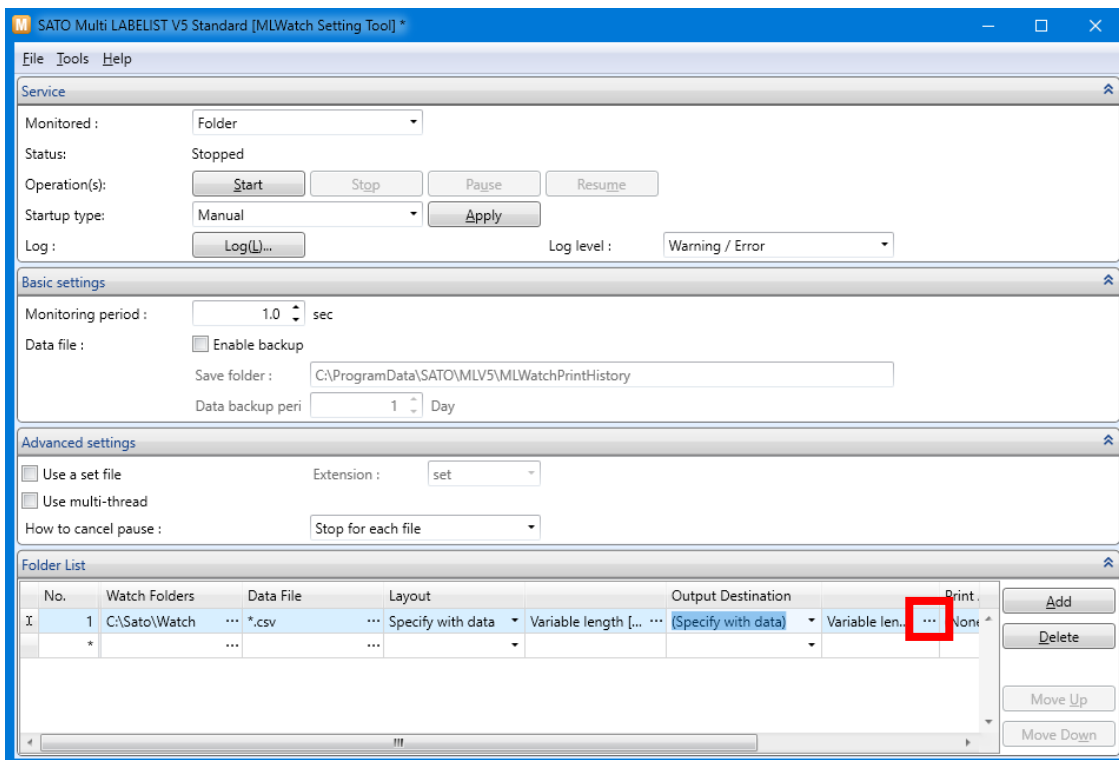


Then set the watching method.

Select [Specify with data] for Output Destination.

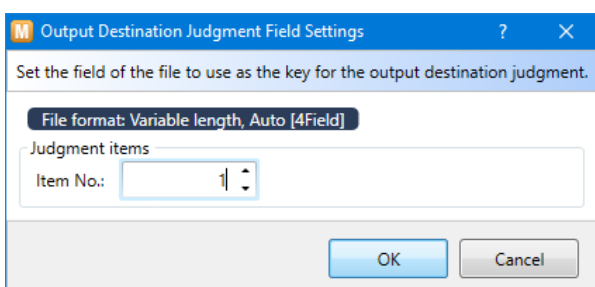
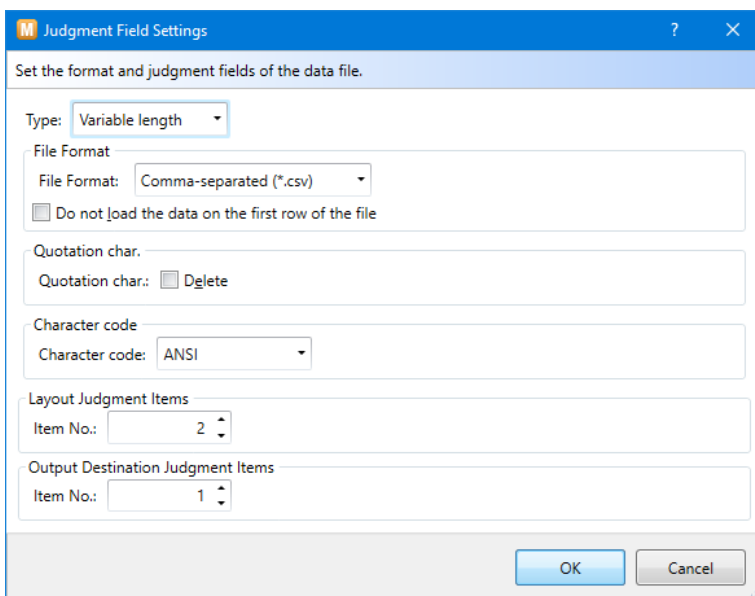


Click "...".

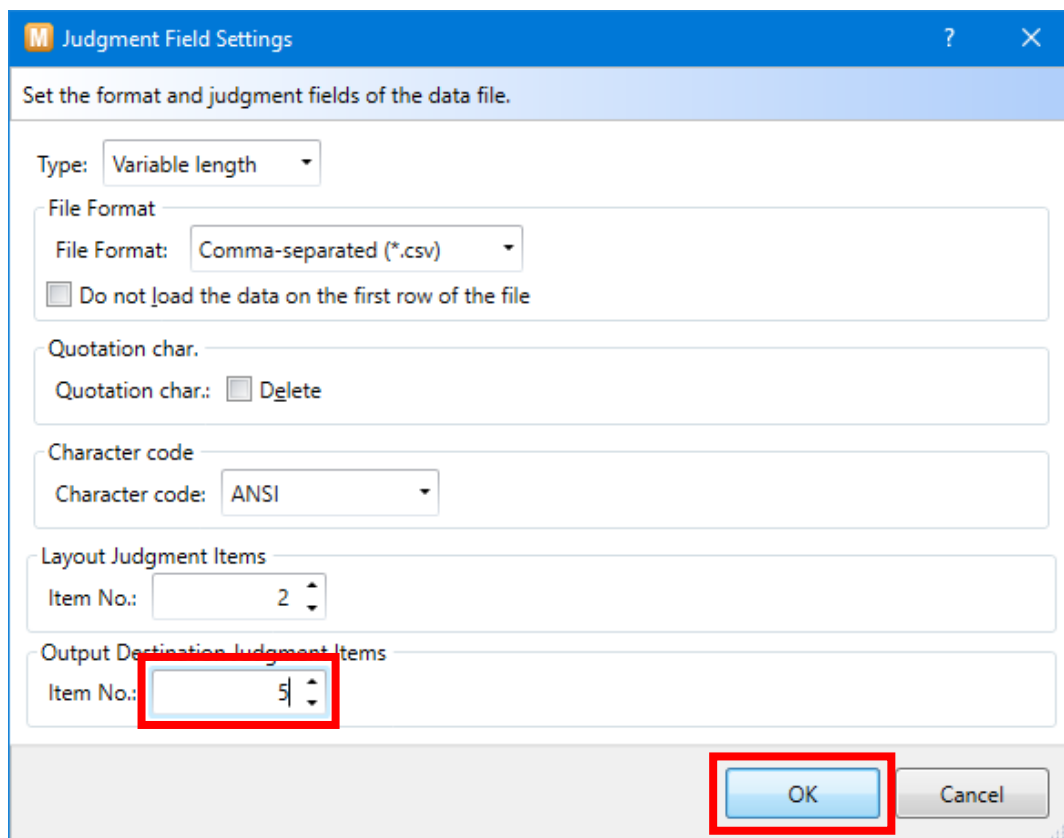


The "Judge Field Settings" screen is displayed.

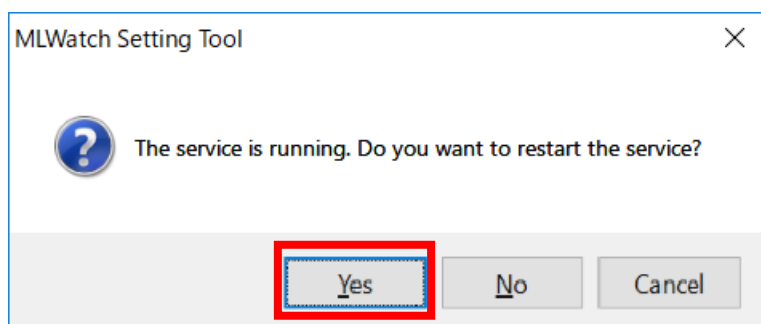
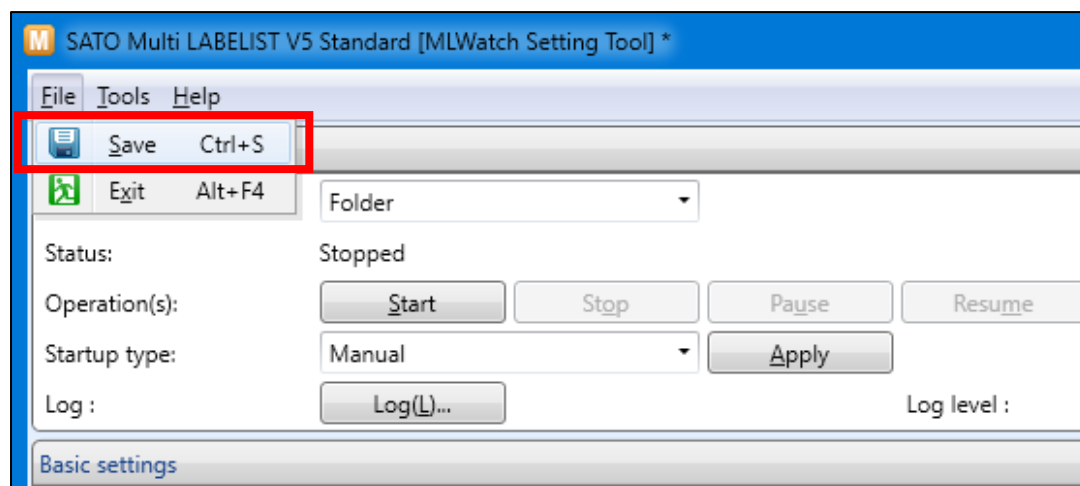
(If the setting of Layout is [Use Fixed Layout], the [Output Judge Field Settings] screen is displayed.)



Set “5” in [Output Destination Judgment Items] and click “OK”.
 (The output destination is judged by the fifth item in the data file.)



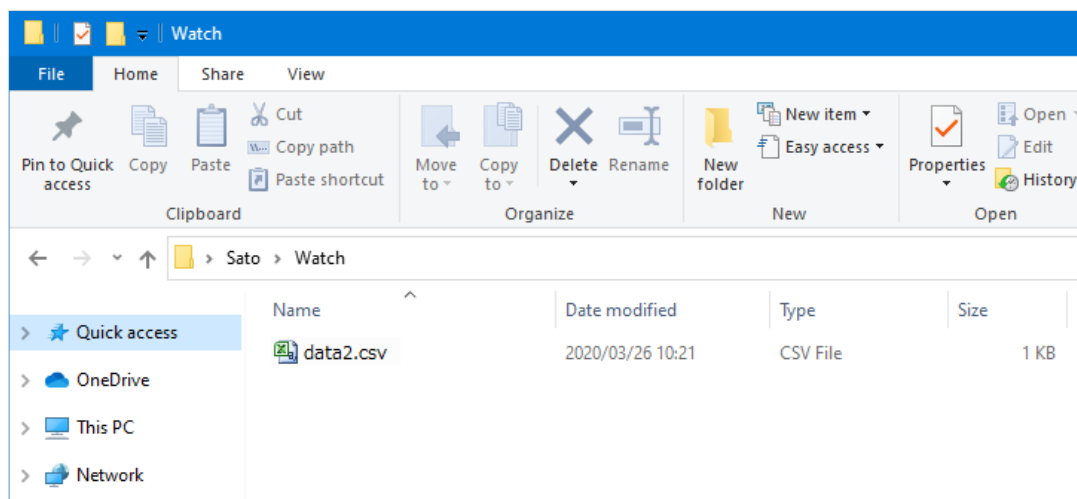
Select “Save” from the File menu to restart the service.



Place the data file in the Watch folder and print them.

Data file: data3.csv

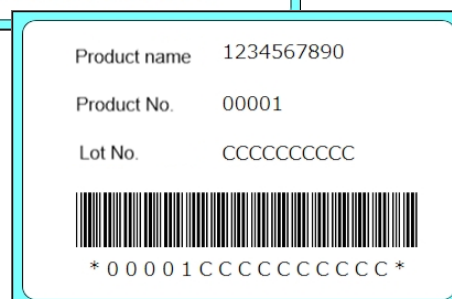
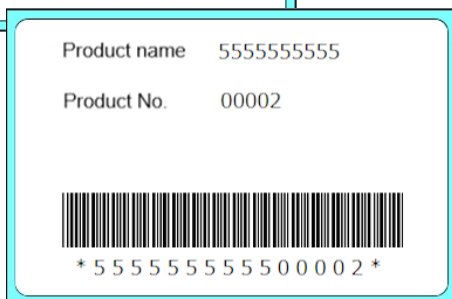
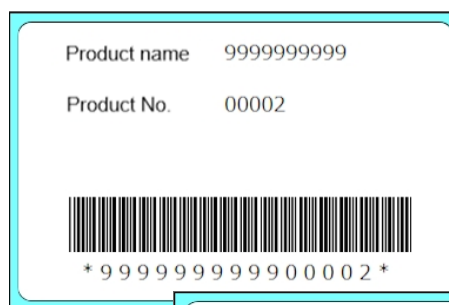
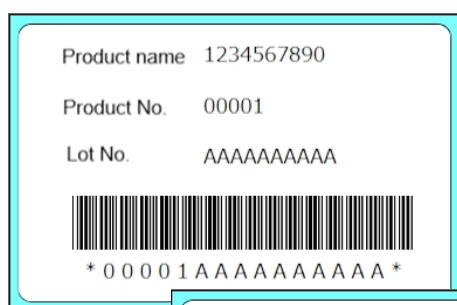
```
1234567890,00001,AAAAAAAAAA,1,PR1
9999999999,00002,1,,PR2
1234567890,00001,CCCCCCCCCC,1,PR2
5555555555,00002,1,,PR1
```



When data are printed from two Output Destination, driver setting is completed.

Printer set for “PR1”

Printer set for “PR2”



This completes [“5: Folder Watch Print”](#).

Useful Functions

1. Specifying Wildcards for the Data File name

For setting the Folder Watch, wildcards can be used when specifying the data file name.

“*” : Character strings of one or more characters

“?” : Any single character

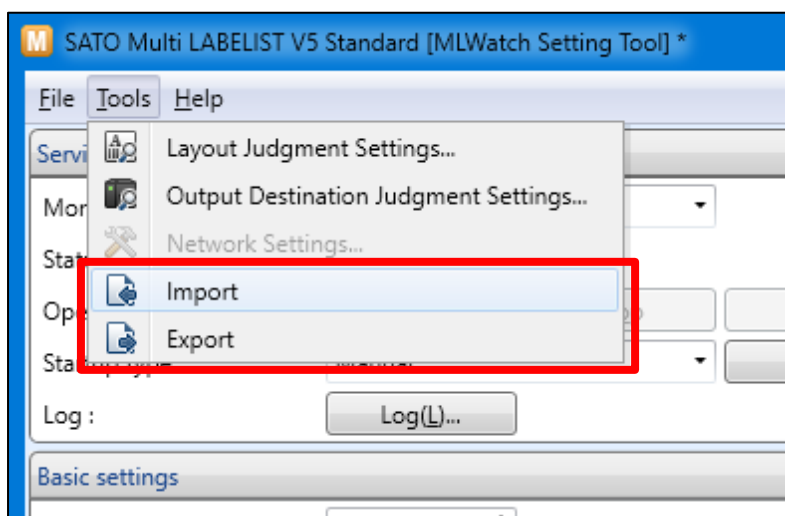
Folder List						
	No.	Watch Folders		Data File		Layout
I	1	C:\Sato\Watch	..	???.csv	...	Specify
	*		

■ Example of Use

Setting example	Description	Applied file name
*.csv	All files with extension .csv	data1.csv, test1.csv, etc.
a-*.txt	A file name beginning with “a-” with extension .txt	a-test.txt, a-001.txt, etc.
data-???.dat	A file name “data-” + any 3 characters with extension .dat	data -001. dat, data-m83.dat, etc.
out????.*	All files whose name is “out” + any 4 characters	out0001.txt, out-abc.csv, etc.

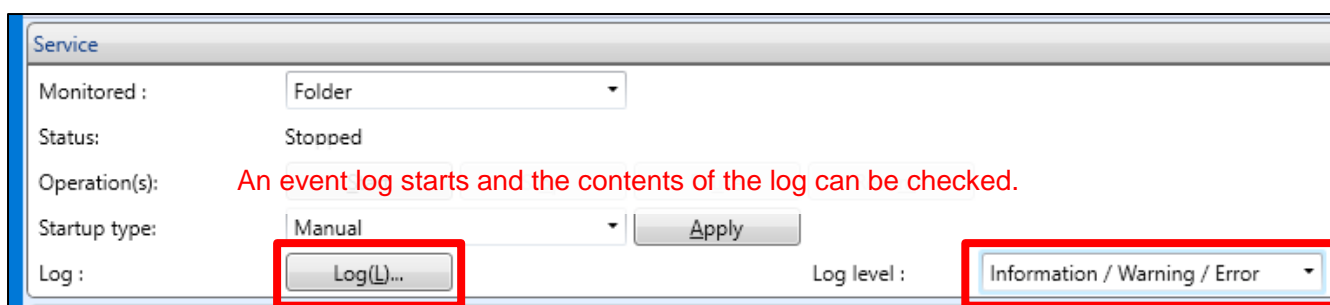
2. Importing and Exporting the Setting Value

The values set by Watching Settings (MLWatch Setting Tool) can be imported from a file or exported to a file. Use this function when replacing your computer or using the same setting values on multiple computers.



3. Log Check and Log Level

On Folder Watch Print, the trouble information generated during watching, such as file analysis error, is always output to an event log. For normally processed information, it is output by changing “Log level:” to “Information / Warning / Error”.



For output contents of the log, check “Help” of MLmaintenance.

4. Data Backup

Data files used for Folder Watch Print can be backed up.

The screenshot shows the 'Basic settings' section of a software interface. It includes the following fields:

- Monitoring period: 1.0 sec
- Data file: Enable backup (highlighted with a red box)
- Save folder: C:\ProgramData\SATO\MLV5\MLWatchPrintHistory
- Data backup period: 1 Day

Backup data for a data file are saved for each row of watched settings separately.

(CommonAppData)\SATO\MLV5\MLWatchPrintHistory\Folder[row number of the folder Information List]

Example: C:\ProgramData\SATO\MLV5\MLWatchPrintHistory\Folder5

File name is automatically set from [Analysis date of data file] and [Data File Name].

It will be automatically deleted after the specified retention period has passed.

5. Specifying the Cut Timing

For Folder Watch Print, a cut operation is done for each record according to the setting of layout.

To cut after printing multiple records, specify "EjectCut", data for cut or file unit cut.

- Cut operation for 1 record

For print action settings of a layout file, set it by timing of eject cut and cut operation.

#	Layout file	Cut operation
Print Action Settings-Others [Use Eject Cut]		
1	Enable (Check)	Cut for each record unit. To cut at any timing, use "EjectCut".
2	Disable (Not Checked)	Follow the settings of the print operation below.
Print Action Settings-Print action "Timing for sort mark print or cut operation"		
3	No	No cut if the operation mode of the printer is continuous print, For a cutter, cut for each sheet.
4	Disable	No cut
5	Cut for each row	Cut for each record unit.
6	Cut for each page	Cut for each record unit. To cut at any timing, use "EjectCut".
7	Perform each time the value of the corresponding item changes	
8	Perform each time print command	
9	Perform each time specified quantity	Cut for the unit of specified quantity and cut the last of fraction.

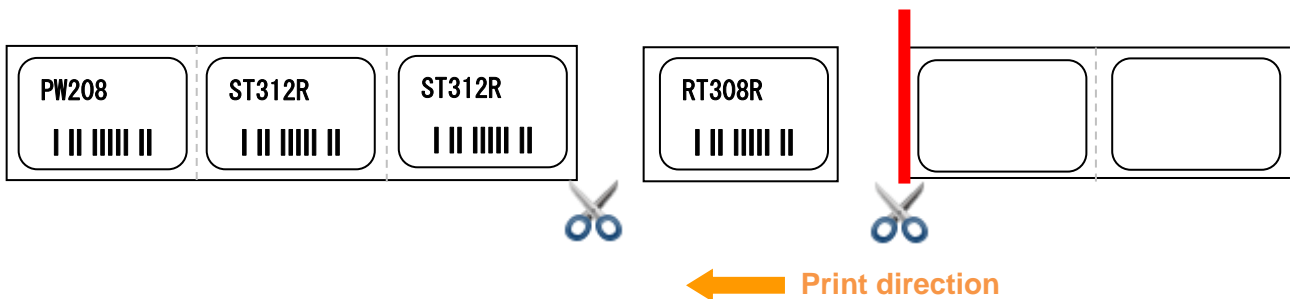
- Use of EjectCut record

If a record for "EjectCut" only is created in a data file, you can cut at any place.

To use "EjectCut", set Eject Cut of Layout file to disabled (#2) and Cut operation also to disabled (#4).

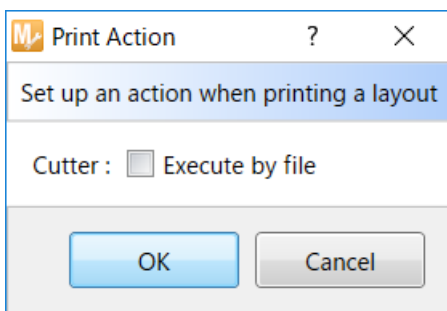
For a data file of fixed length, fill the space to the number of digits of record on which "EjectCut" is to be specified. If the number of digits is not filled, an incorrect number of digits occurs and an error is generated for the following data.

```
"ST312R","19000","490310041310","Meguro head office","2"
"PW208","15000","490310841310","Meguro head office","1"
EjectCut
"RT308R","9500","490310413108","Meguro head office","1"
EjectCut
```



- Cut for each file

When [Cut by file] is enabled for eject cut for a set print operation of watched settings, the label can be cut at the end of the data file.



To cut by file, set Eject Cut of Layout file to disabled (#2) and Cut operation also to disabled (#4).

When Output destination is set to [Specified by Data], the label is cut for the output destination specified by the record at the end of a data file. For output destinations that are not specified by the record at the end, cut is not performed.

6. Output to Multiple Printers

When printing on multiple printers, Folder Watch Print can specify whether to print in record units with the print data or by file with Watch Condition (file name or folder).

- Specifying multiple output destinations for one file

As output destination can be specified by record of a data file, specify multiple printers in order, and output data to printer effectively. As for the setting method, refer to "[Specifying an Output Destination by Data](#)".

- Specifying one output destination by one file

When data to judge the output destination cannot be specified in the record of a data file, set the file name or folder of the data file by Watching Settings for each output destination, and the data will be output to multiple printers.

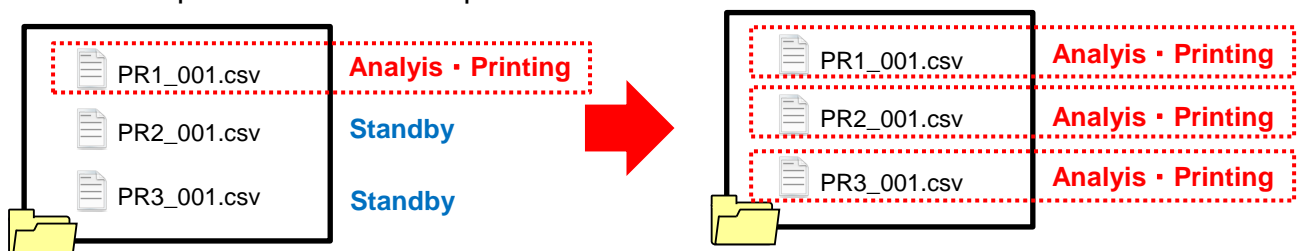
Specifying an output destination with a file name

Folder List						
No.	Watch Folders	Data File	Layout			Output Destination
1	C:\Sato\Watch	PR1*.csv	Use fixed lay...	C:\Sat...		(Specify with data)
2	C:\Sato\Watch	PR2*.csv	Use fixed lay...	C:\Sat...		(Specify with data)
*						

Specifying an output destination with a folder

Folder List						
No.	Watch Folders	Data File	Layout			Output Destination
1	C:\Sato\Watch	*.csv	Use fixed lay...	C:\Sat...		(Specify with data)
2	C:\Sato\Watch	*.csv	Use fixed lay...	C:\Sat...		(Specify with data)
*						

When the number of print quantity or print frequency is high, printers not used for printing will be in standby status while printing a data file. To increase the printing speed, enable "Multi-thread: Use" and multiple data files will be processed at a time.



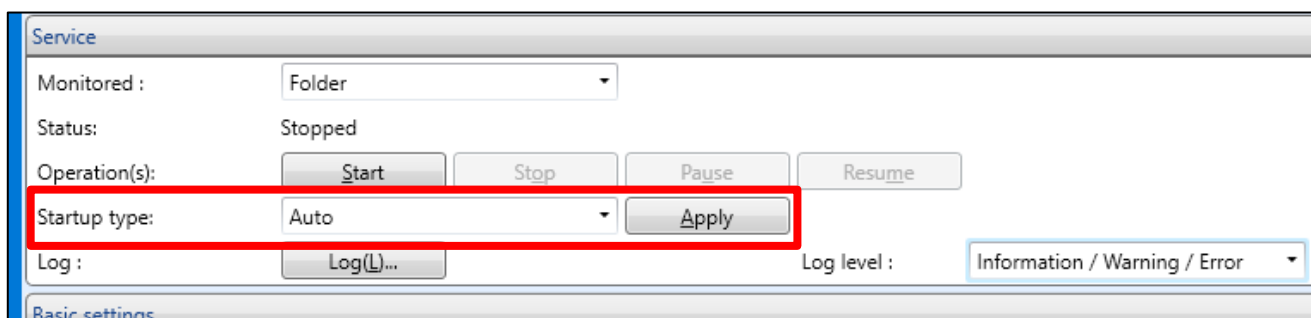
- The number of printers that can be set

Data file	Setting method	Maximum number of printers Plus-Standard-Lite / Enterprise	
		Single thread	Multiple threads
Specify multiple output destination for one file.	Record	30 / 50	-
Specifying one output destination by one file.	File	100 / 500	10 / 50
	Folder	100 / 500	10 / 50

7. Changing the Start Method for Folder Watch

Folder Watch Print runs as Windows service.

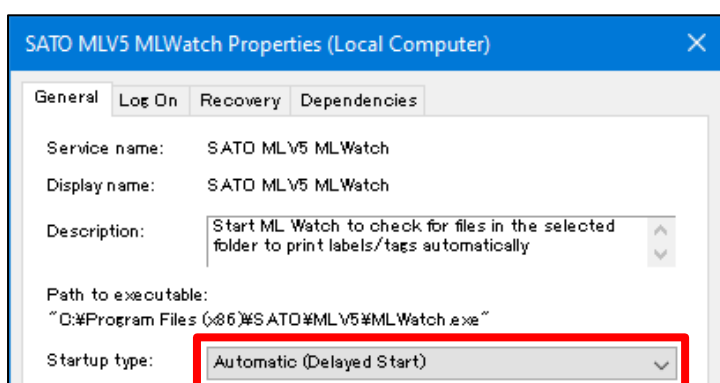
Change the Startup type to set the start method of Folder Watch.



Type of startup	Operation at settings
Automatic	Folder Watch function starts at OS startup.
Manual	Folder Watch function starts only when the "Start" button is pressed. It does not start automatically.
Disable	The Folder Watch Print function is not used. The Folder Watch function does not start even if the "Start" button is pressed.

* If the Folder Watch function does not start automatically at OS startup

It is confirmed that Folder Watch does not start even if "Auto" is set on Windows Server 2008 R2 depending on the startup timing of the OS. If startup fails with "Auto" setting, select Service in "Administrative Tool" from the "Control Panel" and change the type of startup to "Automatic (Delayed start)".

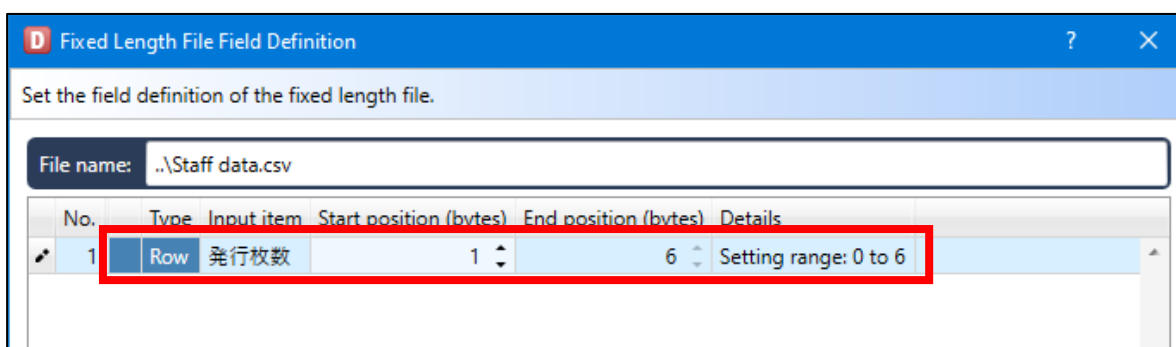
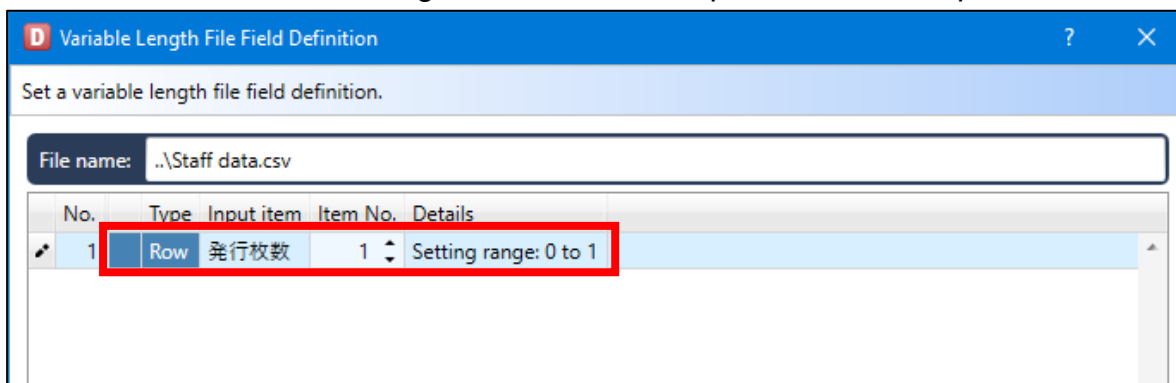


8. Printing data whose print quantity has not been specified

If the top application cannot output the print quantity in data, a function that prints one for each record can be used.

- Printing one for one record

Open the layout file in MLPrint or MLDesign and change the setting of “Print Quantity” of input items in Field Definitions on File Format Settings. For the variable length file, set the item number to “0”. For Fixed- length file, set the Start position and End position to “0”.



6: ODBC Data Import

1. What is ODBC Data Import?

ODBC Data Import is a function to import data required for printing from a database with the ODBC connection.

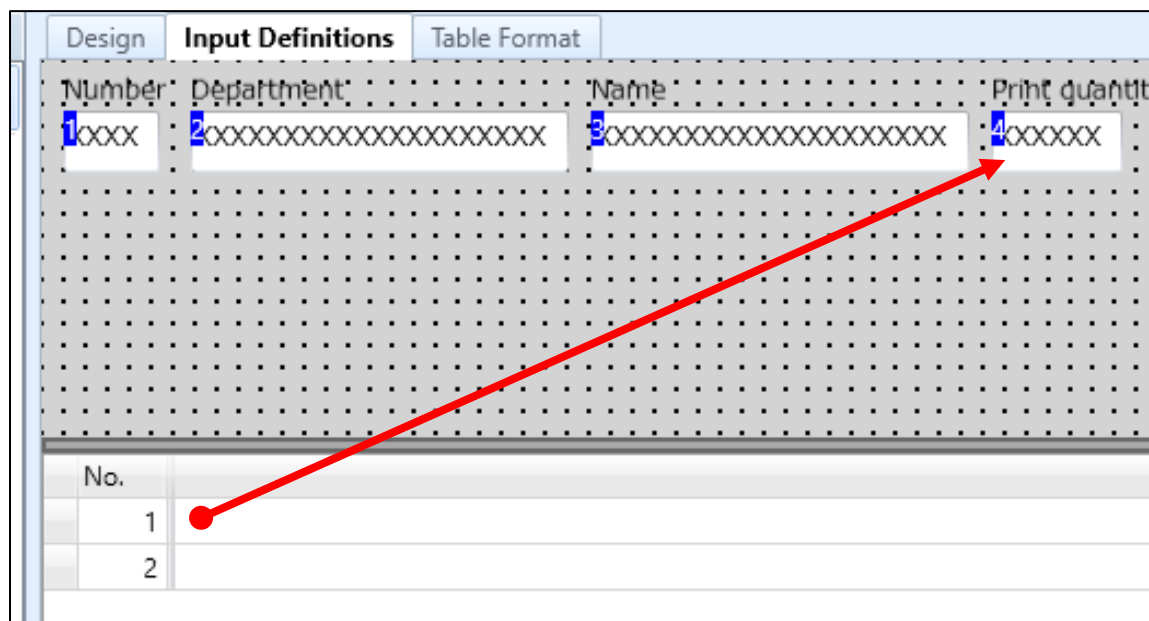
This function enables you to use the existing database or to import data by modifying part of data file.

■ Preparations

Create a layout in advance as shown below.

???? Employee	Printer model	
??? Depart	Paper size Employee number	
??? Name	Input variable	Department name
	Layout name	Name

Display the "Input Definitions" screen and move the Print Quantity from the row section to the header section.



2. ODBC Driver Settings

Create a data file and ODBC driver used for the ODBC connection.

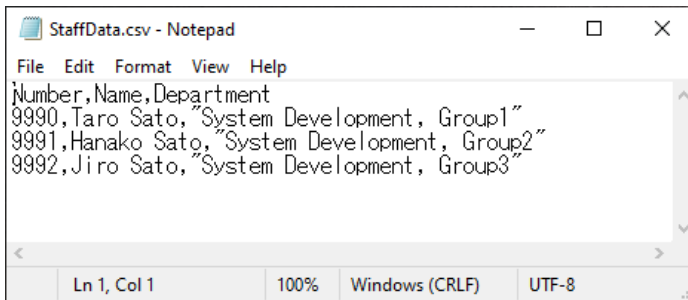
In this section, the procedures for using a CSV file shown below are described.

At the top, a header row is prepared.

It will be used for item settings of the ODBC connection.

File name : Staff Data.csv

Destination : C:¥sato

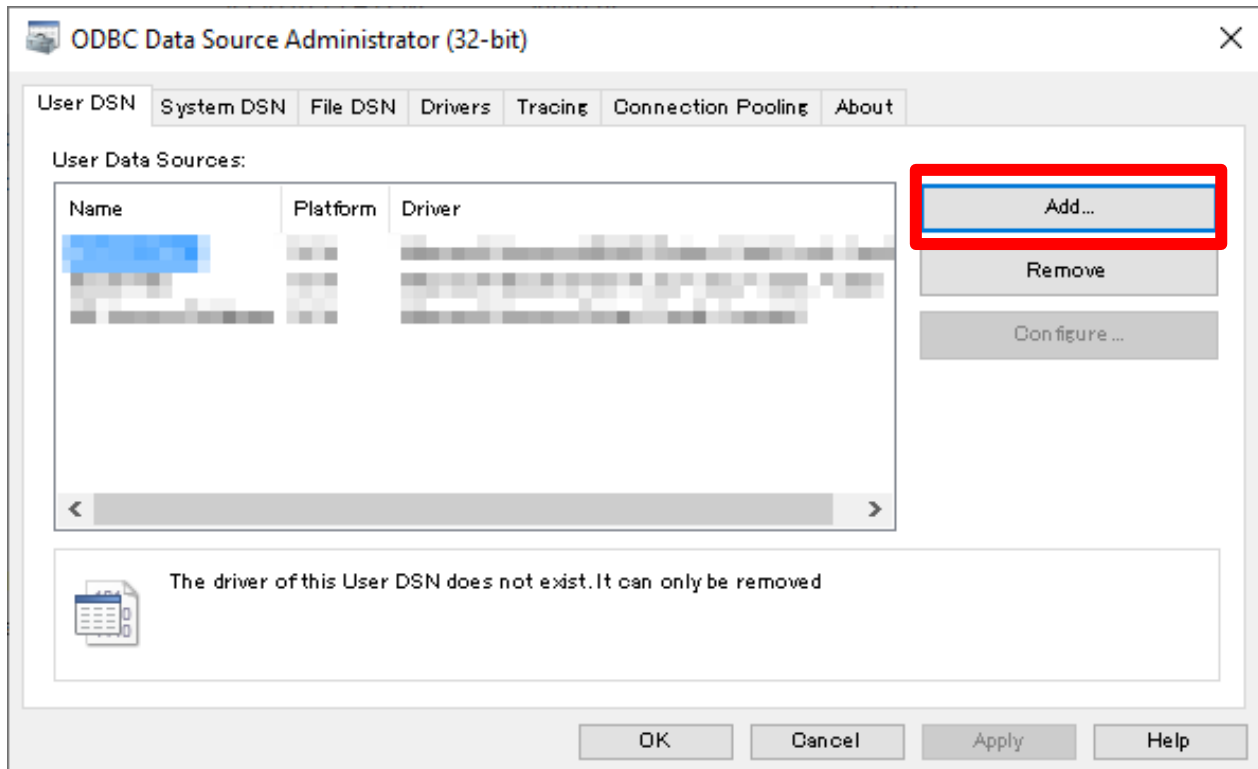


Create a ODBC driver.

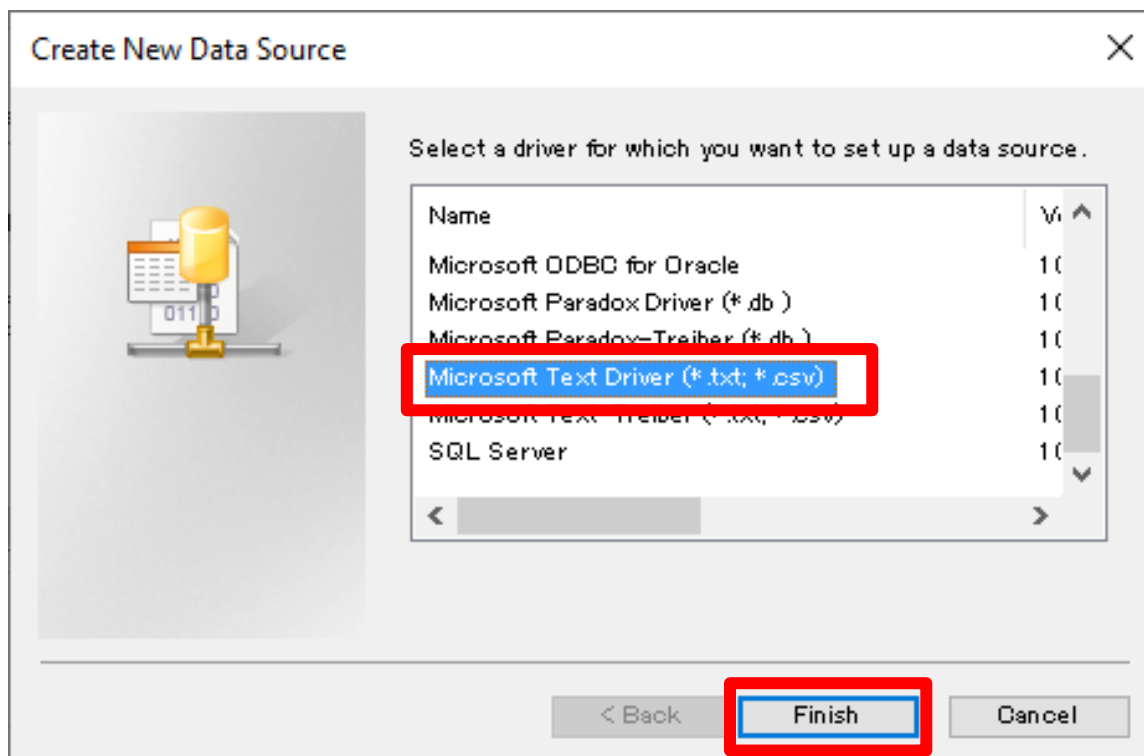
Select “Administrative Tools” from “Control Panel” then “ODBC Data Sources”.

(For a 64-bit OS, select “ODBC Data Sources (32-bit)”)

Click the “Add” button.

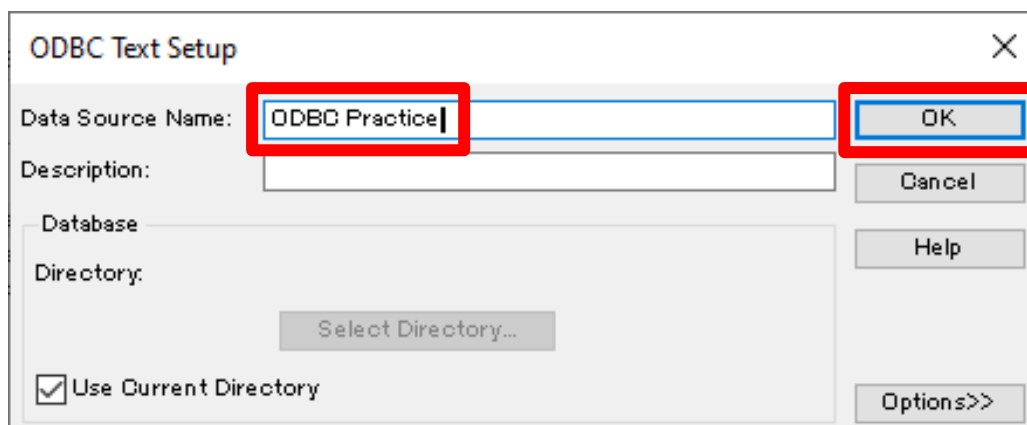


Select “Microsoft Text Driver (*.txt; *.csv)” and click “Finish”.

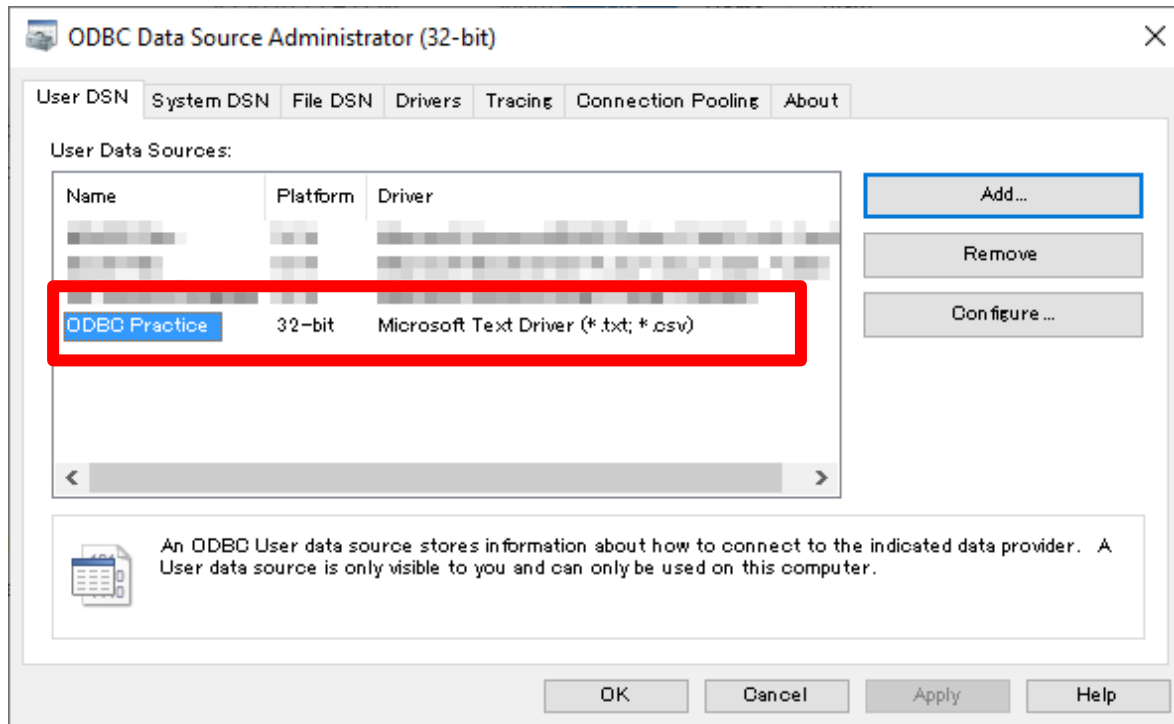


- * When an ODBC driver (Excel, Access) does not exist
Download it from the Microsoft official site and install it.
<https://www.microsoft.com/ja-jp/download/details.aspx?id=13255>
For another ODBC driver, obtain it from the manufacturer.

Enter “ODBC Practice” in “Data Source Name” and click “OK”.



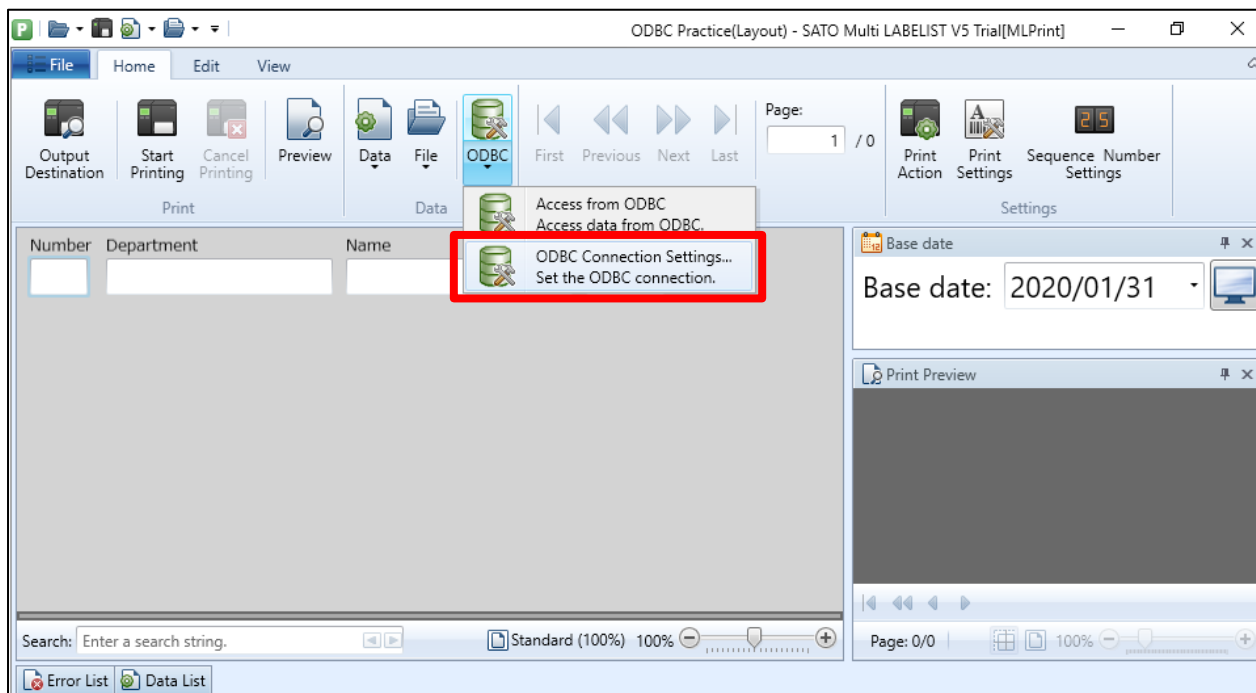
When it is added to the list, driver setting is completed.



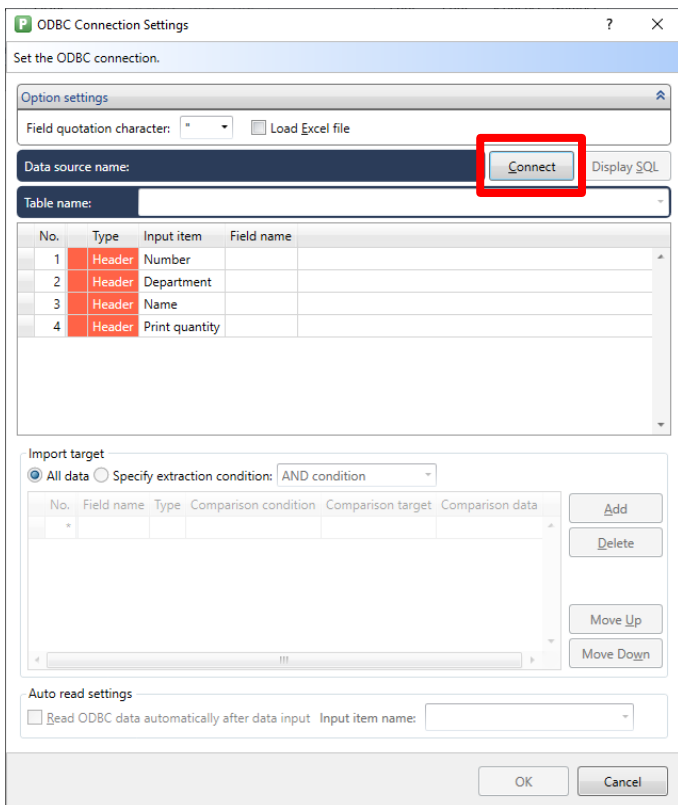
3. ODBC Connection Settings

Then let's make the settings for the ODBC connection to import data on the MLPrint screen.

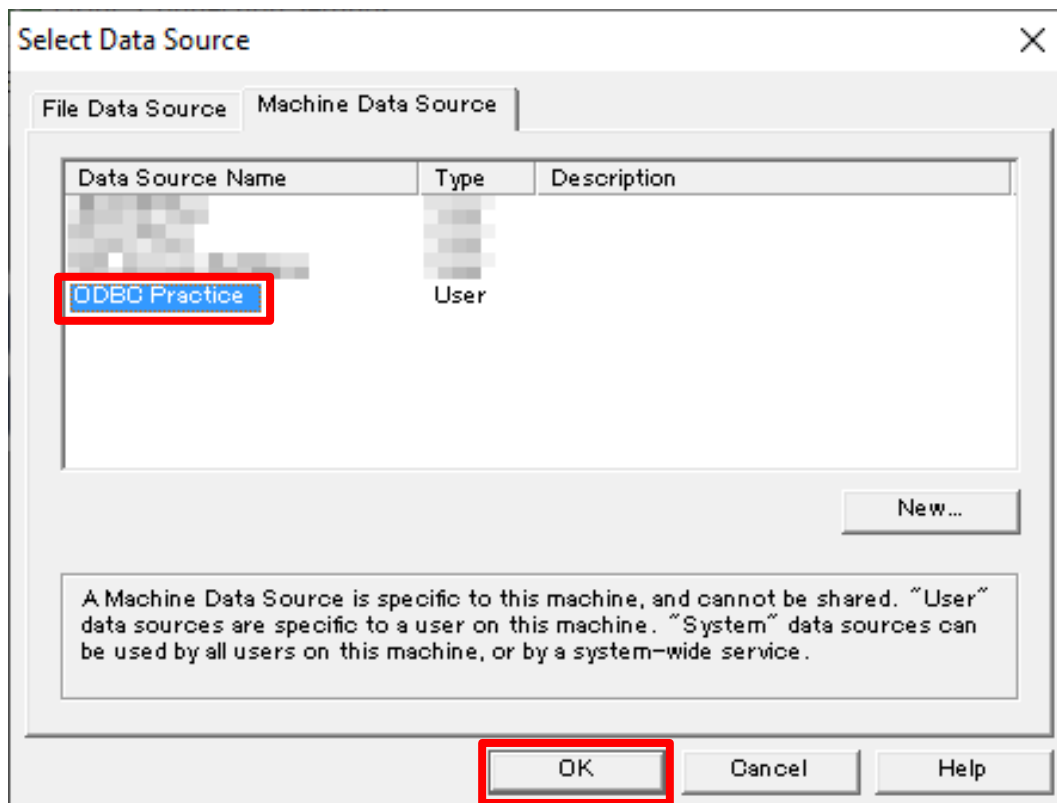
Start the MLPrint screen and select "ODBC Connection Setting".



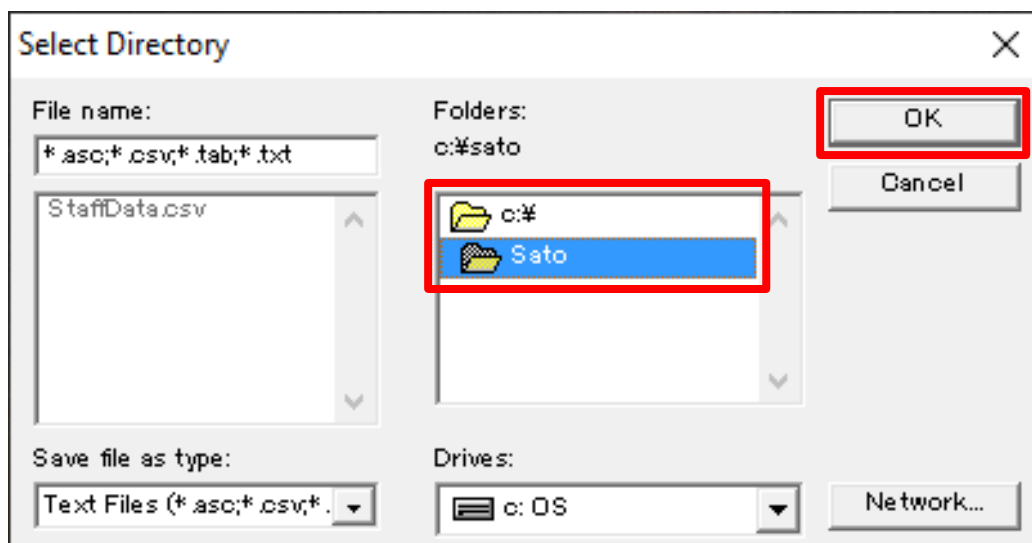
Click "Connect".



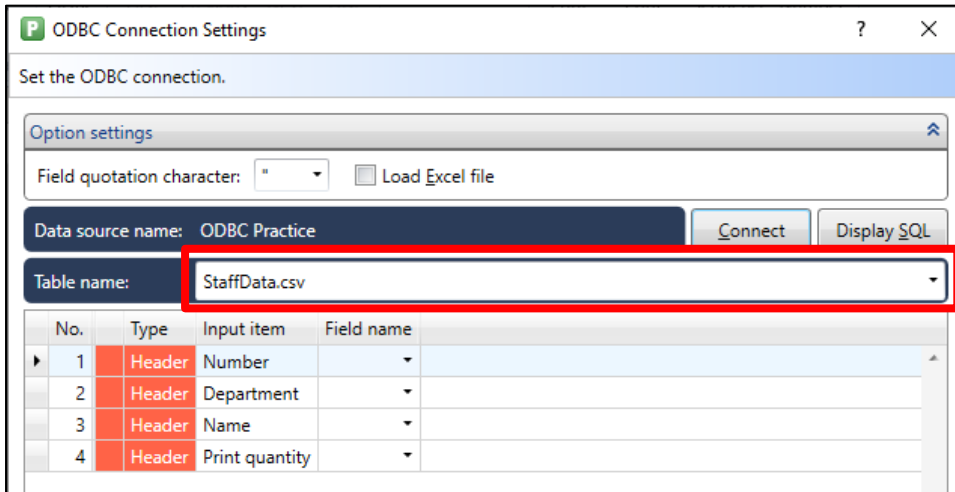
Select "ODBC Practice" on the "Machine Data Source" tab and click "OK".



Select a folder in which the "StaffData.csv" file is saved and click "OK".



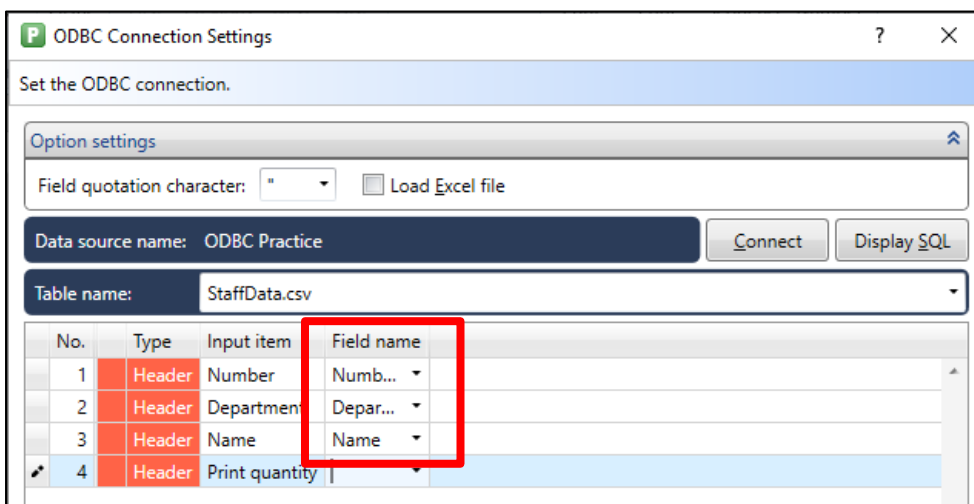
The data file “StaffData.csv” is displayed on the list.



Specify the field name related to the input items.

(As the field name, the title line of the data file is automatically imported.)

Input item name of layout file	Filed name of data file
Employee number	Number
Department name	Department
Name	Name



Specify the extraction condition and click “OK”.

- Extraction condition

To extract data for the entered employee number (department name and name)

Field name : Number
 Type : Numeric
 Comparison condition : =
 Comparison target : Input item
 Comparison data : Employee number

ODBC Connection Settings

Set the ODBC connection.

Option settings

Field quotation character: " Load Excel file

Data source name: ODBC Practice

Table name: StaffData.csv

No.	Type	Input item	Field name
1	Header	Number	Number
2	Header	Department	Depart...
3	Header	Name	Name
4	Header	Print quantity	

Import target

All data Specify extraction condition: OR condition

No.	Field name	Type	Comparison condition	Comparison target	Comparison data
1	Number	Numeric	=	Input item	Number

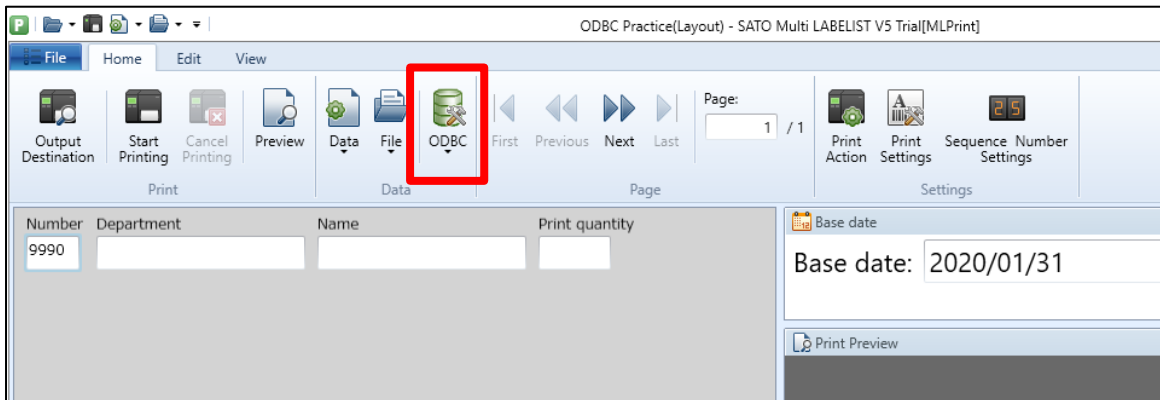
Auto read settings

Read ODBC data automatically after data input Input item name:

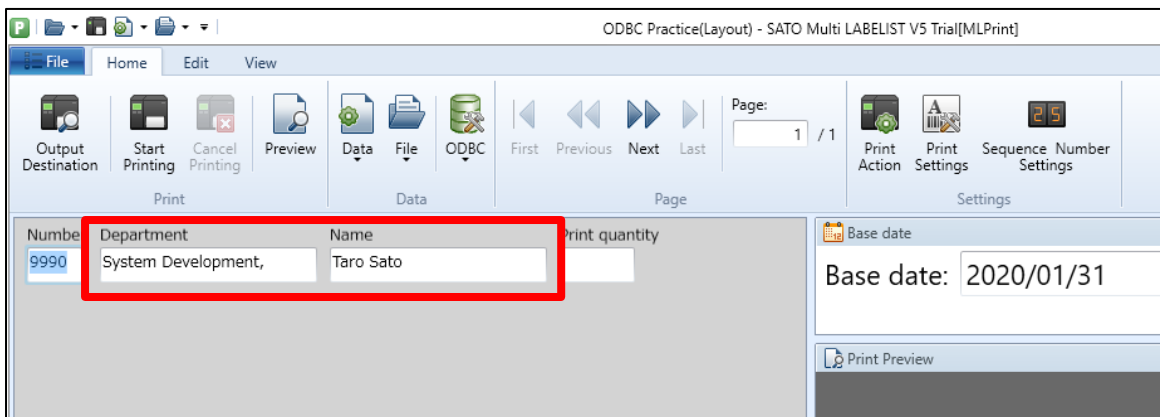
4. Access from ODBC

Then let's import data on the MLPrint screen, with the ODBC connection.

Enter "9990" in "Number" and click the "ODBC" button.



The department and name of an employee whose number is "9990" are imported from the StaffData.csv.



This completes "[6. ODBC Data Import](#)".

To get more out of ODBC data importing, refer to "[Useful Functions](#)".

Useful Functions

This section introduces functions useful when importing ODBC data.

1. Importing ODBC data automatically

If an extract condition is specified, the ODBC data will be automatically imported when input to the specific input item is completed. One step of pressing the “ODBC” button can be skipped.

Enable “Auto read settings” on the ODBC Connection Settings screen and specify the input item to be linked.

The screenshot shows the 'ODBC Connection Settings' dialog box. The 'Auto read settings' section is highlighted with a red box. It contains a checked checkbox labeled 'Read ODBC data automatically after data input' and a dropdown menu for 'Input item name'.

Option settings

Field quotation character: " Load Excel file

Data source name: ODBC Practice

Table name: StaffData.csv

No.	Type	Input item	Field name
1	Header	Number	Number
2	Header	Department	Depart...
3	Header	Name	Name
4	Header	Print quantity	

Import target

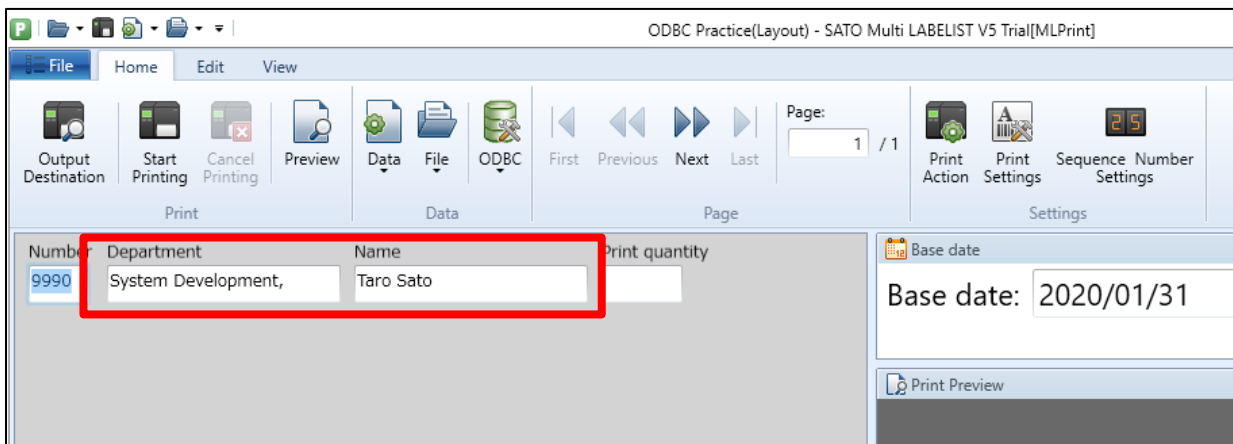
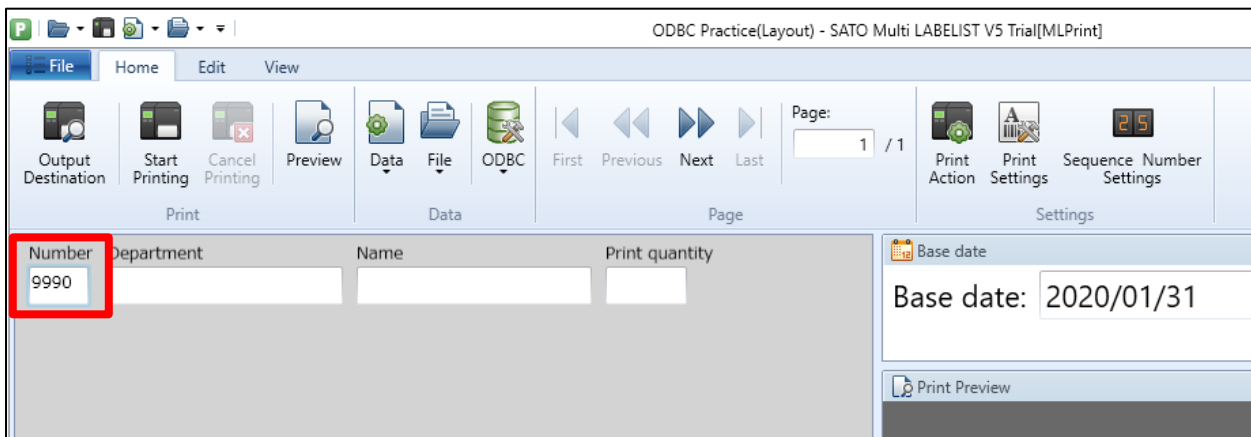
All data Specify extraction condition: OR condition

No.	Field name	Type	Comparison condition	Comparison target	Comparison data
1	Number	Numeric	=	Input item	Number
*					

Auto read settings

Read ODBC data automatically after data input Input item name:

Press the Enter key to finish input and the ODBC data is imported automatically and are reflected on the screen.



2. Importing all data with the ODBC connection

If an extraction condition is not specified on the ODBC Connection Settings, all data is imported by clicking the “ODBC” button.

To import all data when an extraction condition is specified, set the extraction condition for type to “Character” and comparison condition to “like” in “Import target” on the ODBC Connection Settings screen.

ODBC Connection Settings

Set the ODBC connection.

Option settings

Field quotation character: " Load Excel file

Data source name: ODBC Practice

Table name: StaffData.csv

No.	Type	Input item	Field name
1	Header	Number	Number
2	Header	Department	Depart...
3	Header	Name	Name
4	Header	Print quantity	

Import target

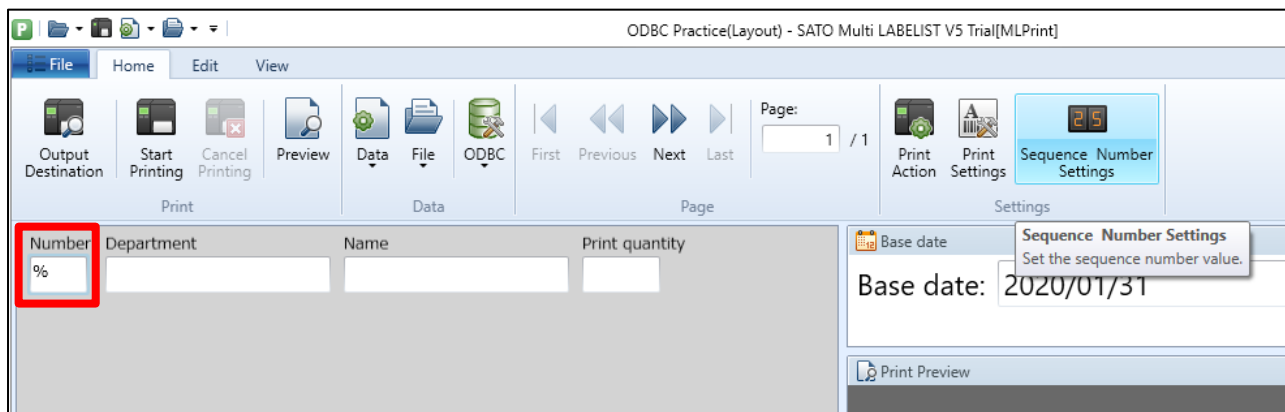
All data Specify extraction condition: OR condition

No.	Field name	Type	Comparison condition	Comparison target	Comparison data
1	Number	Character	like	input item	Number
*					

Auto read settings

Read ODBC data automatically after data input Input item name: Number

Enter “%” in the input item of comparison data on the Print screen, and all data can be imported.

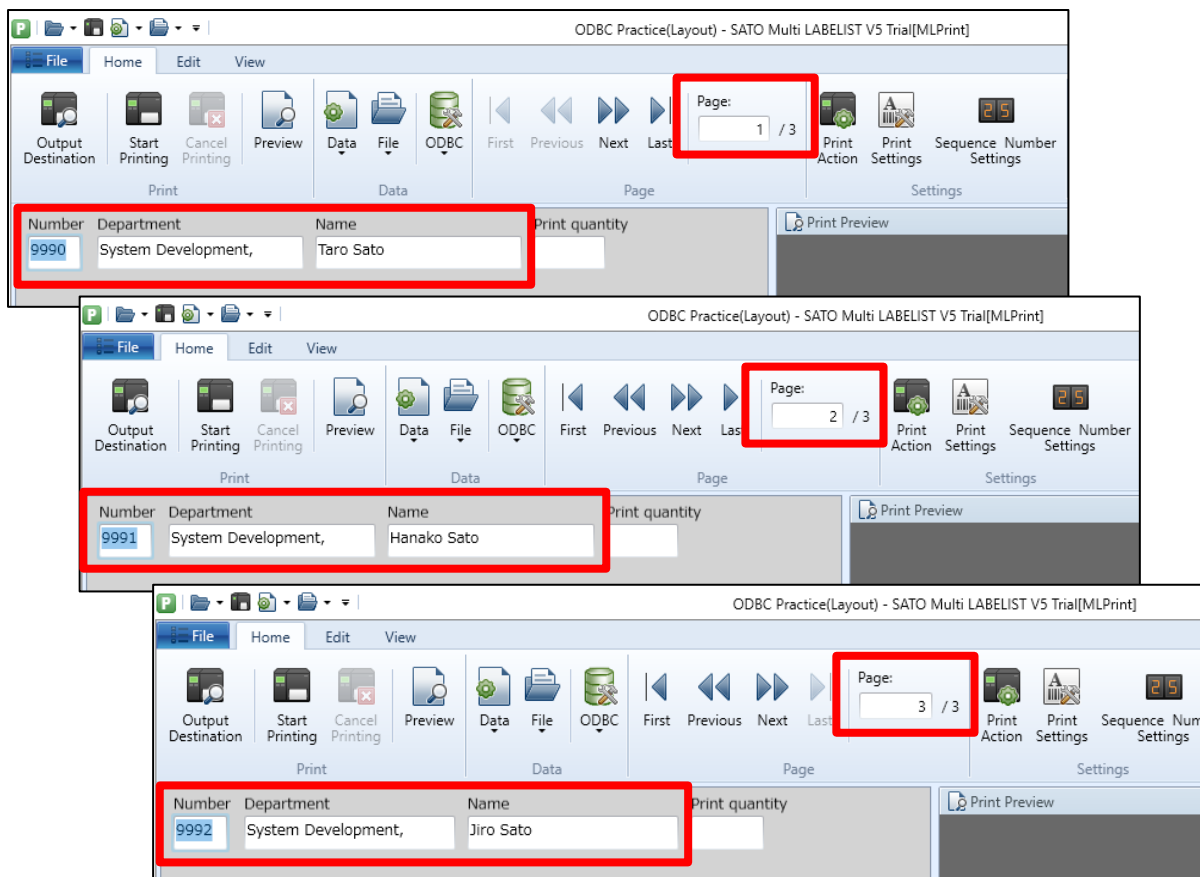


When ODBC data are imported...



The data is imported on a separate page for each record of the data file.

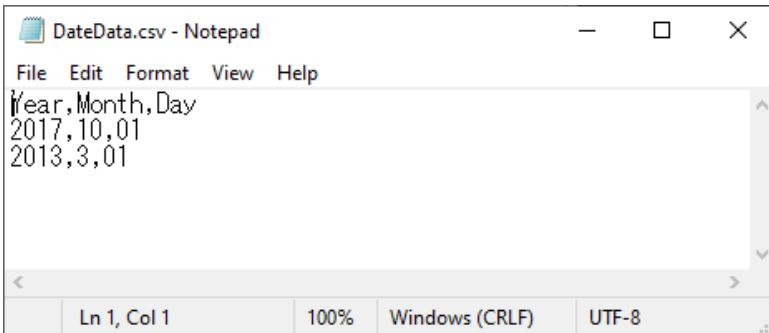
For the layout with the row section, data that have common header information are printed on a single page.



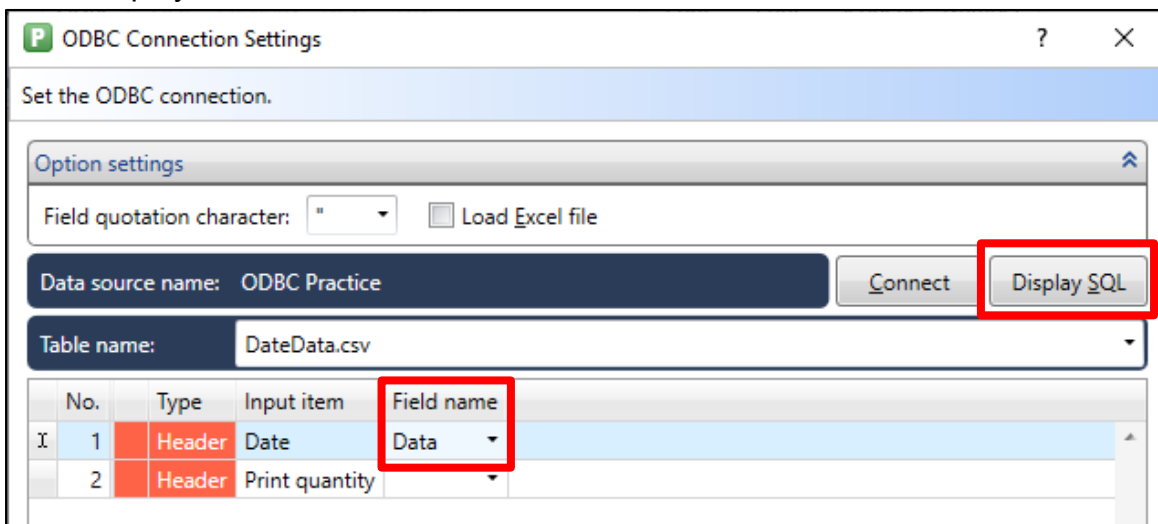
3. Processing the imported data

Data processing, such as importing data in multiple fields into a single input item, is available by modifying the SQL statement.

For example, the target data has "Year", "Month", and "Day" fields and the processed data is to be imported in the input item "Date".

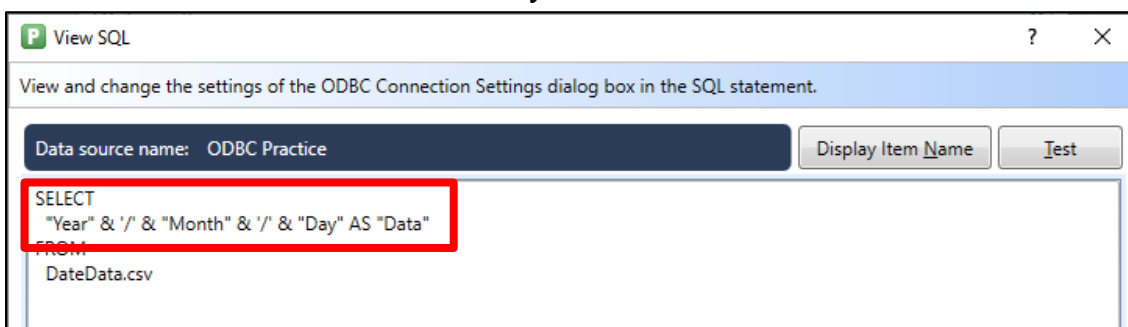


On the ODBC Connection Settings screen, enter the field name "Data" in the input item "Date" and click "Display SQL".



Enter the text below in the SQL statement between SELECT and FROM.

"Year" & '/' & "Month" & '/' & "Day" AS "Data"



Format	Content
"(Field name)"	Specify the field name to be imported.
(A) & (B)	Join the character string.
'(Fixed value)'	Enter a fixed value.
(A) AS (B)	The value (A) is treated as (B).

The above SQL statement means that the data imported from "Year", "Month", and "Day" are joined with "/" and treated as the field name "Data".

Click "Test". If the date is imported, this setting is completed.

