



Reference Guide

Appendix

A guide describing the emulation mode, direct print, web applications, etc.

- This manual may not be edited, modified or copied in whole or in part without the written consent of the publisher.
- Parts of this manual are subject to change without prior notice.
- The screen shots and the illustrations in this manual are used as examples. They may differ from yours depending on the model, the software, or the OS.

Emulation

Print data follows specific rules (grammar). These rules (grammar) are called “print language”.

Print language, with which this product is compatible, can be categorized into page description language that generates images for each page and emulation that can produce results closer to print results made by other printers.

Emulation Mode

Emulation mode	Printer to be emulated
ESC/P	LQ1900K II+
PCL	HP-CLJ5500 (color), HP-LJ4200 (black and white)
HP-GL	7586B or DJ750C Plus
HP-GL/2	DJ750C Plus

Note

- For details of each mode, contact your Fuji Xerox representative.

Changing the print language

This product is compatible with multi-emulation. Due to this, you can switch the corresponding print language.

■ Changing the command

There are commands to change the corresponding print language.

■ Automatic change

The product analyzes the data received by the host interface and automatically identifies the print language.

■ Protocol dependence

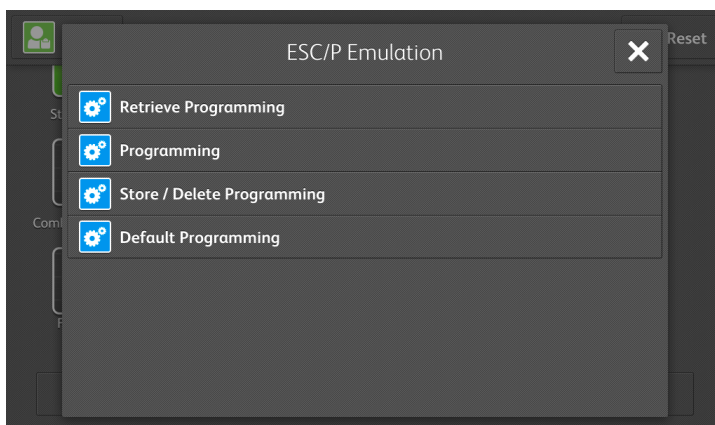
You can fix the print language for each protocol (LPD, IPP, Port9100, WSD) by using CentreWare Internet Services.

Note

- “WSD” stands for Web Services on Devices.

Mode menu screen

This screen is displayed when the emulation mode is selected on the [Print Mode] on the home screen.



Note

- [Retrieve Programming], [Store/Delete Programming], and [Default Programming] are displayed on ESC/P and HP-GL/2.
- You can follow the same procedure with CentreWare Internet Services.

■ Retrieve Programming

Retrieve settings stored in the memory.

■ Programming

Enter the Item Number for the function in [Item Number] to display the current setting.

Enter the new value in [New Value] and tap on [Save] to change the setting.

Refer

- Refer to "Items" (p.14) for Item Number.

■ Store/Delete Programming

You can store the current Items details in [Custom Settings] and delete stored memory.

■ Default Programming

Set the default values.

Available font

Go to [Device] > [Information & Reports] > [Print Reports] > [Printer Reports] and tap on [Font List] or [PCL Font List] to check the available fonts.

User-defined characters (external fonts) can be used with ESC/P.

User-defined characters are registered as bit map fonts and saved even after the power is turned off. Sharing between print languages is not possible.

Print function

Emulation mode	N Pages	Form	Barcode
ESC/P	Yes	64	Yes
PCL	—	—	Yes
HP-GL, HP-GL/2	—	—	—

■ N Pages

2 pages are available.

■ Form

You can register standard forms and print the registered forms by synthesizing them into print data.



Note

- If you try to register more forms than the maximum number of forms to be registered or if the form memory reaches full capacity, new forms cannot be registered.
- Check form registration by going to [Device] > [Information & Reports] > [Print Reports] > [Printer Reports] > [ART IV, ESC/P User Defined List].

■ Barcode

Barcode standards available are JAN code, CODE39, CODABAR, Industrial 2 of 5, Matrix 2 of 5, and Interleaved 2 of 5.

Barcode standards available for PCL are JAN code, CODE39, CODABAR, Interleaved 2 of 5, CODE128, Postal barcode, and QR code.

Go to [Device] > [Information & Reports] > [Print Reports] > [PCL Font List] to specify commands.

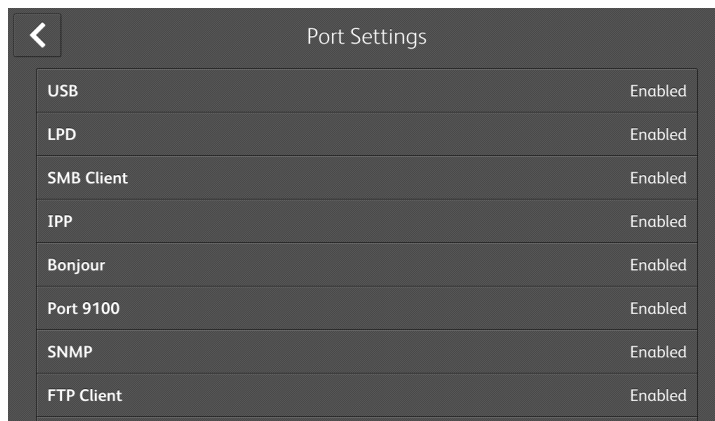
Device menu

Log into the device administrator mode.

Emulation mode	Port Settings	Allocate Memory	Delete Form
ESC/P	Yes	Yes	Yes
PCL	Yes	—	—
HP-GL, HP-GL/2	Yes	Yes	—

■ Port Settings

Tap on [Device] > [Connectivity & Network Setup] > [Port Settings] to enable/disable the port.



Port Settings	
USB	Enabled
LPD	Enabled
SMB Client	Enabled
IPP	Enabled
Bonjour	Enabled
Port 9100	Enabled
SNMP	Enabled
FTP Client	Enabled

- Enable port (USB/LPD/IPP/Port9100/WSD)

Tap on the port to be used in the emulation mode.

- USB-print mode specification

You can specify the processing method for data received from the host device. If you select the emulation mode here, “automatic change” explained in “Changing the print language” (p.2) will not be performed.

Note

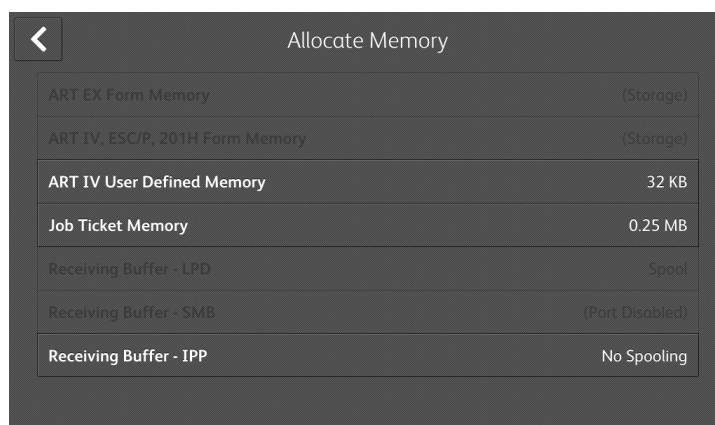
- You can also specify the print mode for each protocol by using CentreWare Internet Services.

■ Allocate Memory

Tap on [Device] > [App Settings] > [Print Settings] > [Allocate Memory].

Note

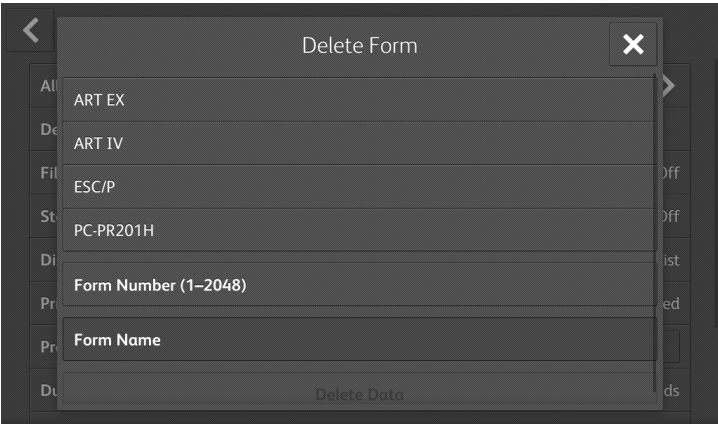
- If storage is attached, the settings cannot be changed.



Allocate Memory	
ART EX Form Memory	(Storage)
ART IV, ESC/P, 201H Form Memory	(Storage)
ART IV User Defined Memory	32 KB
Job Ticket Memory	0.25 MB
Receiving Buffer - LPD	Spool
Receiving Buffer - SMB	(Port Disabled)
Receiving Buffer - IPP	No Spooling

■ Delete Form

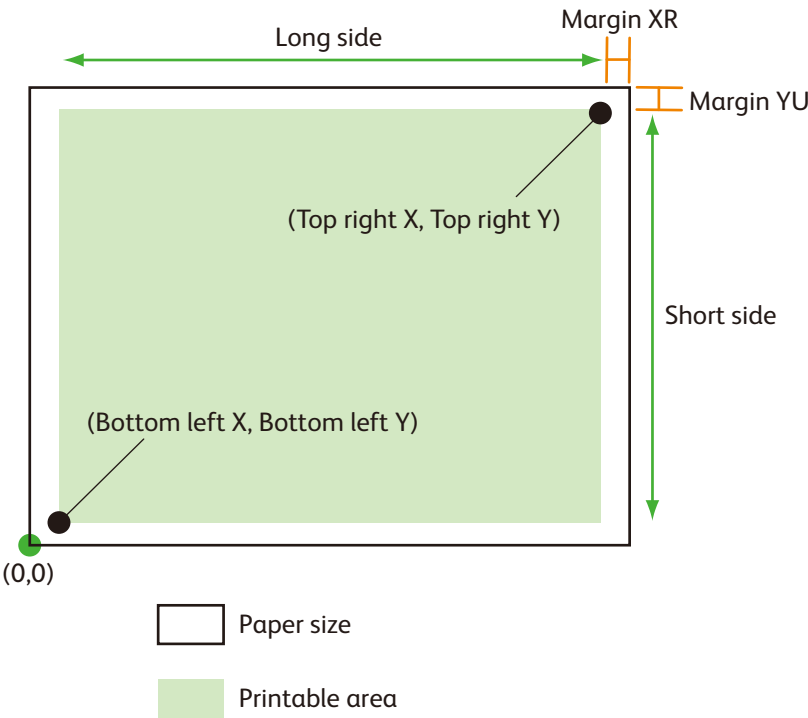
Tap on [Device] > [App Settings] > [Print Settings] > [Delete Form] and select the mode to delete a form.



HP-GL, HP-GL/2 Emulation-specific Matters

Printable area

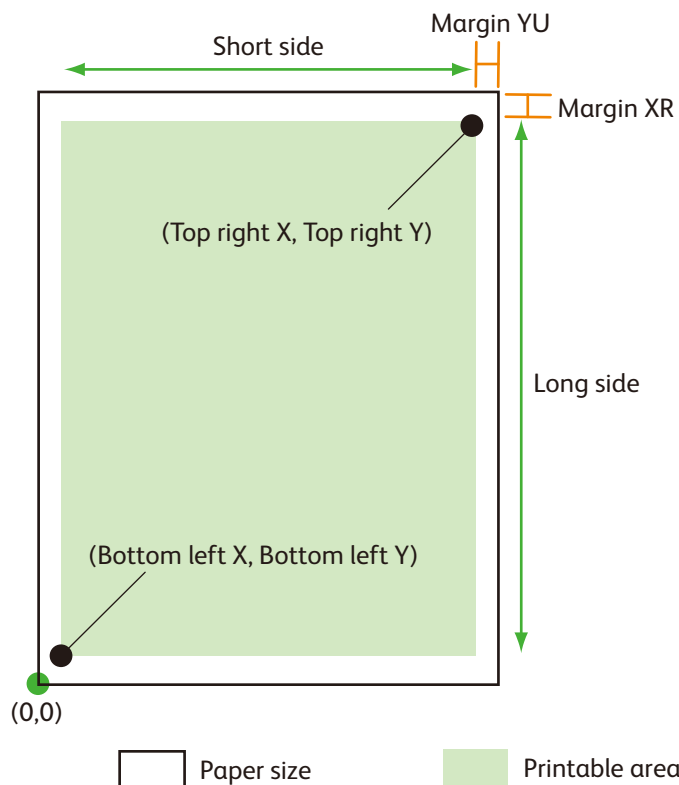
◆ SEF



Paper size	Paper length (1/7200")		Coordinate value (1/7200")							
	X direction	Y direction	Margin		Printable area		Top right corner		Margin	
	Length	Width	Bottom left X	Bottom left Y	Long side	Short side	Top right X	Top right Y	XR	YU
A3	119052	84168	1260	1260	116532	81648	117792	82908	1260	1260
A4	84168	59508	1260	1260	81648	56988	82908	58248	1260	1260
A5	59508	41940	1260	1260	56988	39420	58248	40680	1260	1260

Paper size	Paper length (1/7200")		Coordinate value (1/7200")							
	X direction	Y direction	Margin		Printable area		Top right corner		Margin	
	Length	Width	Bottom left X	Bottom left Y	Long side	Short side	Top right X	Top right Y	XR	YU
JIS B4	103176	72828	1260	1260	100656	70308	101916	71568	1260	1260
JIS B5	72828	51588	1260	1260	70308	49068	71568	50328	1260	1260

◆ LEF



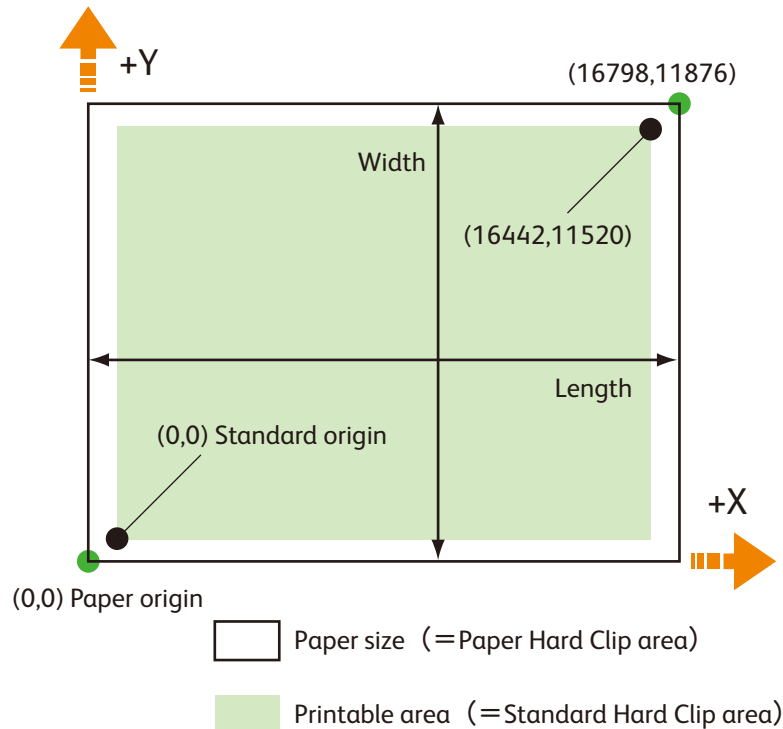
Paper size	Paper length (1/7200")		Coordinate value (1/7200")							
	X direction	Y direction	Margin		Printable area		Top right corner		Margin	
	Length	Width	Bottom left X	Bottom left Y	Long side	Short side	Top right X	Top right Y	XR	YU
A3	84168	119052	1260	1260	81648	116532	82908	117792	1260	1260
A4	59508	84168	1260	1260	56988	81648	58248	82908	1260	1260
A5	41940	59508	1260	1260	39420	56988	40680	58248	1260	1260
JIS B4	72828	103176	1260	1260	70308	100656	71568	101916	1260	1260
JIS B5	51588	72828	1260	1260	49068	70308	50328	71568	1260	1260

Hard Clip

Area determined by coordinates is called Hard Clip area.

Hard Clip area is determined by the printable area or paper size.

◆ **When the size is A3 and the starting point is the bottom left**



■ Standard

Printable area of this device is the Hard Clip area.

■ Paper

Same size as the paper is the Hard Clip area.

Auto Layout

Printed area is automatically determined based on the specified items, such as the document size and paper size.

■ Document size

You can enable “Auto Layout” by selecting “Auto” (default value).

■ Auto Layout

You can enable “Scale”, “Scale mode”, “Area determination mode”, and “Paper margin” by selecting “ON” (default value).

■ Scale

Enlarge/reduce the printed area to fit the drawn object area in the paper size.

■ Scale mode

◆ Paper size

Document size is determined based on the drawn object area. Sizes to be determined are A sizes (6 types from A0 through A5).

◆ Object area

Document size is determined based on the starting point of the drawn object area.

■ Area determination mode



Note

- The object area is determined in Adapted without a command.

◆ Auto

It is automatically selected when the priority is PS > IW > IP > Adapted.

◆ PS

Area including the area specified by the PS command in the beginning is the object area.

◆ IW

Area specified by the last IW command within the data is the object area.

◆ IP

Area specified by all IP commands is the object area.

◆ Adapted

Object area is determined automatically.

■ Paper margin

You can specify the margin.

■ Pen attribute

You can specify the setting for the pen to draw the boundary lines for the Hard Clip area.

There are 16 pen types (No.00 through No.15) available.

◆ Pen width

If reduced by the combination of the “document size” and “paper size”, the pen width is also reduced.

Line width grows thicker from the center of the line.

If the width is 0.0 mm, nothing will be drawn.

◆ Pen end shape

You can specify the end shape for the pen.



Note

-

◆ Pen connection shape

You can specify how pen lines are processed when connected.



Note

- “None” has the shortest processing time and is suitable for checking.
- If symbols are specified by symbol mode commands, connection process is not performed. Symbol mode commands refer to HPGL commands that specify symbols.
- They are not valid for characters.

◆ Pen color

Pen colors are specified with RGB.

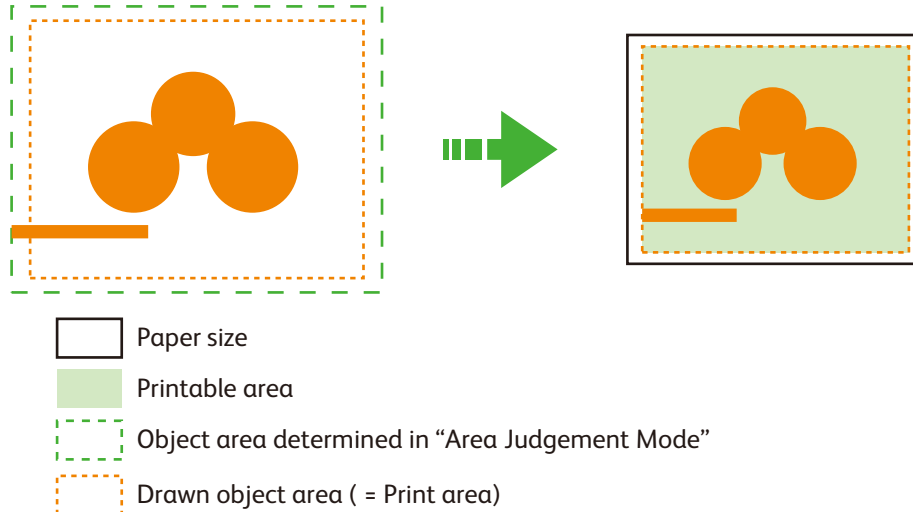
◆ Pen intensity

You can specify the pen intensity.

■ Item combination examples in Auto Layout

◆ Scale mode : Paper size, scale : ON

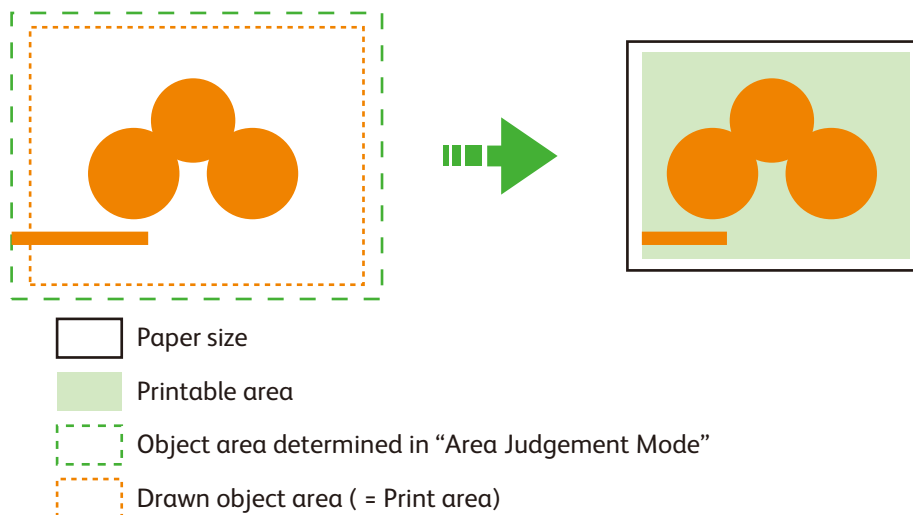
Image is reduced/enlarged within the printed area and printed.



◆ Scale mode : Paper size, scale : OFF

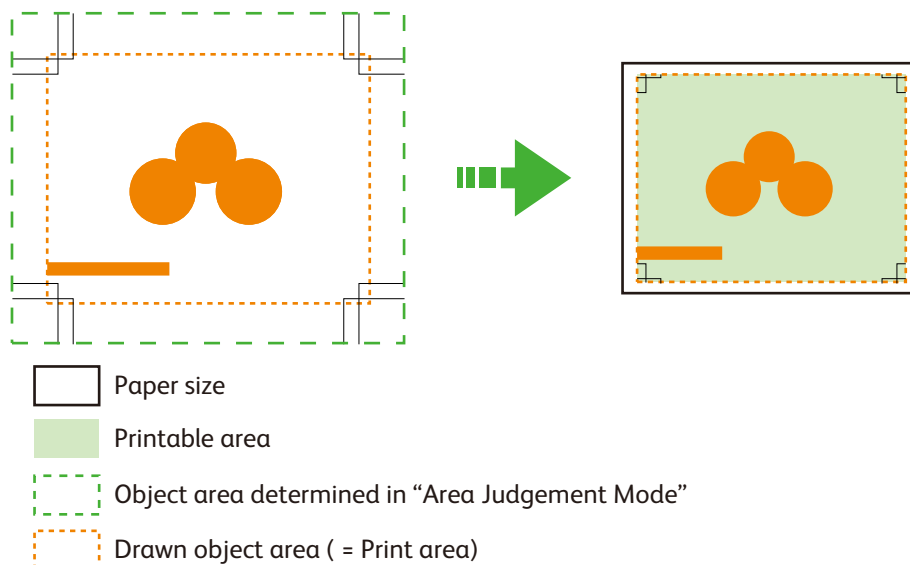
Image is printed in the actual size.

Due to this, areas larger than the paper size are not printed.



◆ **Scale mode : Object area, scale : ON**

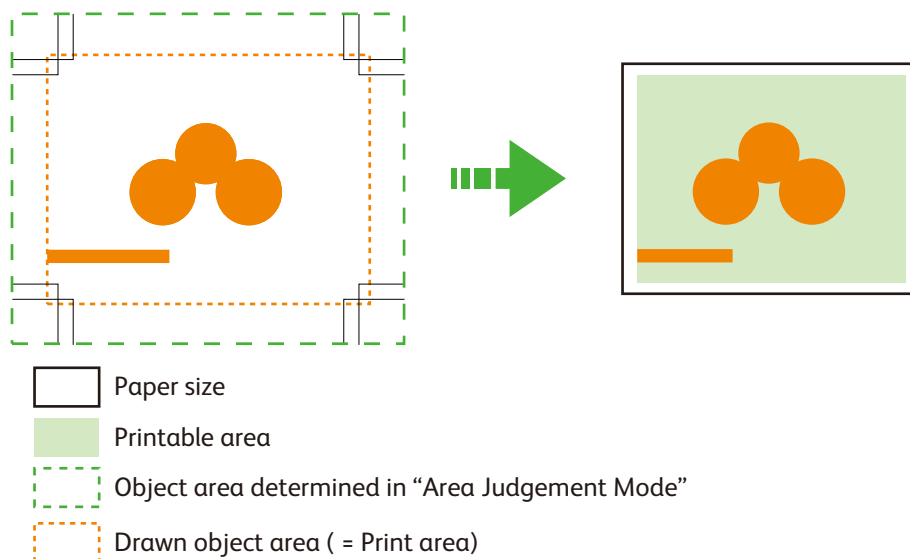
Image is reduced/enlarged within the printed area and printed.



◆ **Scale mode : Object area, scale : OFF**

Image is printed in the actual size.

Due to this, areas larger than the paper size are not printed.



■ **How to determine the document size**

1. **The largest value among the following values is added as the margin to the object area determined in the "area determination mode".**
 - Character size specified within the page
 - Default character size
 - Half of specified pen width
2. **"Object area determined in the area determination mode" + "added margin" - "specified paper margin" will be the drawn object area.**

- 3. If the “scale mode” is “paper size”, the document size is determined based on the drawn object area.**
If the “scale mode” is “object area”, the document size is determined based on the starting point of the drawn object area.

◆ **Determination method example**

If Auto Layout = ON, Document size = Auto, Scale mode = Paper size, Area determination mode = IP, Paper margin = 10 mm, and Pen width = 0.1 mm

IN;

IP-8399,-5938,8399,5938;

IW-8399,-5938,8399,5938;

PU;

SP1;

:

:

SP0;



Note

- There is no character size specification command, and area specified by IP and IW is A3.

• **Determination method**

- 1. Areas “-8399, -5938, 8399, 5938” specified by IP commands are the object areas.**
- 2. There is no character size specification command, and the pen width is 0.1 mm, so half of the A3 size default character size height (75 plotter unit) is added to the object area.**
Object area at this point : -8474,-6013,8474,6013
- 3. Paper margin (10 mm) is removed from the object area.**
Object area at this point : -8074,-5613,8074,5613
- 4. Since the drawn object area (printed area) is greater than A4 and equal to or smaller than A3, the document size is A3.**

■ **How to determine the paper size**

◆ **If “Document size” is “Auto” and “Paper supply tray” is “Auto”.**

- If the “scale mode” is “paper size” and the same paper size as the document size is set in the tray, the paper size is the same as the document size
- If the “scale mode” is “object area”, the paper size is the object area determined in the area determination mode



Note

- If the same paper size is not available, the next size is selected.
 - Exceeding the maximum size : Maximum size
 - Under the minimum size : Minimum size
 - Between the minimum and maximum sizes : Fitting size

■ How to determine the reduction rate

◆ If “Document size” is “Auto” and “Scale mode” is “Paper size”

Reduction rate is determined by the drawn object area and “Paper size”. Hard Clip area is “Paper”.

- If Auto Layout is “ON”, document is placed at the center of the paper.
- If the starting point is the bottom left or center, the starting points of the document and paper are aligned.
- If the reduction rate is less than 22.5 % (such as A0 -> A5), it will be the actual size.

◆ If “Document size” is “Auto” and “Scale mode” is “Object area”

Reduction rate is determined by the starting point of the drawn object area and paper size. Hard Clip area is “Standard”.

Maximum scale value is 210.0 %, and the minimum scale value is 22.5 %.

Paper size	0°				90°			
	Minimum value		Maximum value		Minimum value		Maximum value	
	P2x - P1x	P2y - P1y	P2x - P1x	P2y - P1y	P2x - P1x	P2y - P1y	P2x - P1x	P2y - P1y
A3	7829	5485	73075	51200	5485	7829	51200	73075
A4	5485	3828	51200	35733	3828	5485	35733	51200
A5	3828	2648	35733	24720	2648	3828	24720	35733
JIS B4	6762	4723	63120	44088	4723	6762	44088	63120
JIS B5	4723	3297	44088	30773	3297	4723	30773	44088

Unit : Plotter unit


Items

Item descriptions are ESC = ESC/P, PCL = PCL, HP = HP-GL, and HP-GL/2.










Note


- You can follow the same procedure with CentreWare Internet Services.

Items	Item Number			Specification value
	ESC	PCL	HP	
Document size	1	—	—	[0] : Postcard [3] : A3 [4] : A4 [5] : A5 [14] : JIS B4 [15] : JIS B5 [21] : 8.5 x 14 [22] : 8.5 x 13 [23] : 8.5 x 11 [24] : 11 x 17 [99] (default value) : Paper size [100] : Continuous paper (10 x 12) [101] : Continuous paper (10 x 11) [102] : Continuous paper (15 x 12) [103] : Continuous paper (15 x 11)  Note <ul style="list-style-type: none"> If continuous paper is specified, you cannot specify “paper position”.
Document size	—	—	101	[0] : A0 [1] : A1 [2] : A2 [3] : A3 [4] : A4 [5] : A5 [10] : JIS B0 [11] : JIS B1 [12] : JIS B2 [13] : JIS B3 [14] : JIS B4 [15] : JIS B5 [99] (default value) : Auto [100] : Paper size

Items	Item Number			Specification value
	ESC	PCL	HP	
Paper size If “Paper supply tray” is “Auto” or “Tray 5 (hand feed)”	2	—	—	[0] : Postcard [3] : A3 [4] : A4 [5] : A5 [14] : JIS B4 [15] : JIS B5 [21] : 8.5 x 14 [22] : 8.5 x 13 [23] : 8.5 x 11 [24] : 11 x 17
Paper size If “Paper supply tray” is “Auto” or “Tray 5 (hand feed)”	—	—	102	[3] : A3 [4] : A4 [5] : A5 [14] : JIS B4 [15] : JIS B5 [99] : Auto [101] (default value) : A size
Paper size If “Paper supply tray” is “Auto”.	—	202	—	[3] : A3 [4] (default value) : A4 [5] : A5 [14] : JIS B4 [15] : JIS B5 [21] : 8.5 x 14 [22] : 8.5 x 13 [23] : 8.5 x 11 [24] : 11 x 17 [25] : User defined paper [30] : 8K
Paper size If “Paper supply tray” is “Hand feed tray”.	—	203	—	[3] : A3 [4] (default value) : A4 [5] : A5 [14] : JIS B4 [15] : JIS B5 [21] : 8.5 x 14 [22] : 8.5 x 13 [23] : 8.5 x 11 [24] : 11 x 17 [25] : User defined paper






Items	Item Number			Specification value
	ESC	PCL	HP	
Paper supply tray	3	201	103	[0] : (default value : PCL, HP-GL/2) Auto [1] : (default value : ESC/P) Tray 1 [2] : Tray 2 [3] : Tray 3 [4] : Tray 4 [5] : Tray 5 (hand feed) [6] : Tray 6  Note • If “Auto” is specified and if the same size paper is set in multiple trays in the same paper direction, the paper is supplied in the order of Tray 1 > Tray 2 > Tray 3 > Tray 4 > Tray 6. If the same size paper is set in multiple trays in different directions, paper set SEF is supplied first.
Coordinate rotation	—	—	104	[0] (default value) : 0 ° [1] : 90 °
Color mode  Note • This setting is valid for color printers.	5	—	—	[0] (default value) : Color [1] : Black and white
	—	216	—	[0] (default value) : Auto [1] : Color [2] : Black and white
	—	—	105	[0] (default value) : Color [1] : Grey scale [2] : Black pen
Depth mode  Note • This setting is valid for black and white printers.	—	—	105	[1] (default value) : Grey scale [2] : Black pen
Auto Layout	—	—	106	[0] (default value) : ON [1] : OFF
Palette priority specification	—	—	107	[0] (default value) : Command [1] : Panel
Number of outputs	8	—	108	[1] to [250] (default value : 1) : 1 to 250  Note • If the client PC specifies the number of printed copies, the value is reflected and printed. After printing, the setting on the operation panel will also be this value. However, the number of copies specified by the lpd port does not change.
	—	212	—	[1] to [999] (default value : 1) : 1 to 999






Items	Item Number			Specification value
	ESC	PCL	HP	
Ejected to	9	204	109	[0] : (default value) : Center tray (lower level) [1] : Side tray (optional) [2] : Center tray (upper level) (optional) [80] : Finisher tray (optional) [81] : Finisher ejection tray (optional)
2 sided	12	—	110	[0] (default value) : None [1] : Opened horizontally [2] : Opened vertically
	—	206	—	[0] (default value) : OFF [1] : ON
Binding method if 2 sided	—	217	—	[0] (default value) : Long side binding [1] : Short side binding
Paper direction	19	205	—	[0] (default value) : Vertical [1] : Horizontal
Paper position  Note <ul style="list-style-type: none"> This cannot be specified if "Continuous paper" is specified in "Document size". 	20	—	—	[0] (default value) : No cut sheet feeder (left) [1] : With cut sheet feeder (center)  Note <ul style="list-style-type: none"> If there is no cut sheet feeder, the number of lines specified by VFU is fed when FF (page break command) is received. If there is a cut sheet feeder, there will be a page break.
	—	—	—	
Scale mode	54	—	—	[0] (default value) : Fixed scale [1] : Arbitrary scale [2] : Entire cut paper  Note <ul style="list-style-type: none"> "Fixed scale" refers to the scale automatically calculated based on the specified "Document size" and "Paper size", and the printable area for the document size is printed to fit within the printable area of the paper size. Due to this, if the document size and paper size are the same, it is printed at 100 % (scale). If the specification is 2 pages, 2 pages worth of document size is printed to fit within the printable area of one paper size. "Arbitrary scale" refers to the scale specified in "Scale" > "Arbitrary scale". The reference value of the scale is the top left of the printable area. This is the reference point for all characters, images, and graphics. The entire cut paper area is printed in the printable area. "Entire cut paper area" refers to the scale automatically calculated based on the specified "Document size" and "Paper size", and the physical paper size for the specified document size is printed to fit within the printable area of the paper size. If continuous paper is specified in "Document size", "Fixed scale" and "Entire cut paper area" produce the same printing result.





Items	Item Number			Specification value
	ESC	PCL	HP	
Arbitrary scale/ vertical scale	17	—	—	[45] to [210] (default value : 100) : 45 to 210 %
Arbitrary scale/ horizontal scale	18	—	—	
Grid	22	—	—	[0] (default value) : Image [1] : Font  Note • You can specify the printing method for 2 byte grid font.
Default font	—	207	—	[0] : CG Times [1] : CG Times Italic [2] : CG Times Bold [3] : CG Times Italic Bold [4] : Univers Medium [5] : Univers Medium Italic [6] : Univers Bold [7] : Univers Bold Italic [8] : Univers Medium Condensed [9] : Univers Medium Condensed Italic [10] : Univers Bold Condensed [11] : Univers Bold Condensed Italic [12] : Antique Olive [13] : Antique Olive Italic [14] : Antique Olive Bold [15] : CG Omega [16] : CG Omega Italic [17] : CG Omega Bold [18] : CG Omega Bold Italic [19] : Garamond Antiqua [20] : Garamond Kursiv [21] : Garamond Halbfett [22] : Garamond Kursiv Halbfett [23] (default value) : Courier [24] : Courier Italic [25] : Courier Bold [26] : Courier Bold Italic [27] : Letter Gothic [28] : Letter Gothic Italic [29] : Letter Gothic Bold [30] : Albertus Medium [31] : Albertus Extra Bold



Items	Item Number			Specification value
	ESC	PCL	HP	
Default font	—	207	—	[32] : Clarendon Condensed [33] : Coronet [34] : Marigold [35] : Arial [36] : Arial Italic [37] : Arial Bold [38] : Arial Bold Italic [39] : Times New [40] : Times New Italic [41] : Times New Bold [42] : Times New Bold Italic [43] : Symbol [44] : Wingdings [45] : Line Printer [46] : Times Roman [47] : Times Italic [48] : Times Bold [49] : Times Bold Italic [50] : Helvetica [51] : Helvetica Oblique [52] : Helvetica Bold [53] : Helvetica Bold Oblique [54] : CourierPS [55] : CourierPS Oblique [56] : CourierPS Bold [57] : CourierPS Bold Oblique [58] : SymbolPS [59] : Palatino Roman [60] : Palatino Italic [61] : Palatino Bold [62] : Palatino Bold Italic [63] : ITC Bookman Light [64] : ITC Bookman Light Italic [65] : ITC Bookman Demi [66] : ITC Bookman Demi Italic [67] : Helvetica Narrow [68] : Helvetica Narrow Oblique [69] : Helvetica Narrow Bold [70] : Helvetica Narrow Bold Oblique [71] : New Century Schoolbook Roman










Items	Item Number			Specification value
	ESC	PCL	HP	
Default font	—	207	—	[72] : New Century Schoolbook Italic [73] : New Century Schoolbook Bold [74] : New Century Schoolbook Bold Italic [75] : ITC Avant Garde Book [76] : ITC Avant Garde Book Oblique [77] : ITC Avant Garde Demi [78] : ITC Avant Garde Demi Oblique [79] : ITC Zapf Chancery Medium Italic [80] : ITC Zapf Dingbats
Default symbol	—	208	—	[0] (default value) : Roman 8 [1] : ISO 8859-1 Latin 1 [2] : ISO 8859-2 Latin 2 [3] : ISO 8859-9 Latin 5 [4] : ISO 8859-10 Latin 6 [5] : PC-8 [6] : PC-8 DN [7] : PC-775 [8] : PC-850 [9] : PC-852 [10] : PC-1004 (OS/2) [11] : PC Turkish [12] : Windows 3.1 Latin 1 [13] : Windows 3.1 Latin 2 [14] : Windows 3.1 Latin 5 [15] : DeskTop [16] : PS Text [17] : MC Text [18] : Microsoft Publishing [19] : Math 8 [20] : PS Math [21] : Pi Font [22] : Legal [23] : ISO 4 United Kingdom [24] : ISO 6 ASCII [25] : ISO 11 Swedish : names [26] : ISO 15 Italian [27] : ISO 17 Spanish [28] : ISO 21 German [29] : ISO 60 Norwegian v1 [30] : ISO 69 French

Items	Item Number			Specification value
	ESC	PCL	HP	
Default symbol	—	208	—	[31] : Windows 3.0 Latin 1 [32] : Windows Baltic [33] : Symbol [34] : Wingdings [35] : UCS-2
Font size	—	209	—	[400] to [5000] (default value : 1200) : 4.00 to 50.00 points
Font pitch size	—	210	—	[600] to [2400] (default value : 1000) : 6.00 to 24.00 points
Number of font lines	—	211	—	[5] to [128] (default value : 64) : 5 to 128 lines
Vertical position calibration	15	—	113	[0] (default value) : None [1] to [500] : - 250 to + 250 mm
Horizontal position calibration	16	—	114	 Note • You can specify the print position (or Hard Clip area).
2 page mode	21	—	—	[0] (default value) : None [1] : Forward direction [2] : Backward direction  Note • If horizontal is specified in “Document size”, the result is the same for both “Forward direction” and “Backward direction”.
Blank paper ejection  Note • This is not reflected if extension command is sent.	51	—	—	[0] (default value) : None [1] : Yes  Note • You can specify the blank paper ejection. • If “None” is selected, a blank page is not generated in 2 page print or 2 sided print. • Blank paper is ejected if there is space created with external fonts or white objects even if “None” is selected.
Print digit range	52	—	—	[0] (default value) : Standard [1] : Extension  Note • You can extend the right margin position. • If the right margin position is specified with a command, the position becomes the right edge.
Image enhancement	53	213	163	[0] : OFF [1] (default value) : ON
Character grade	55	—	—	[0] (default value) : High grade [1] : Draft

Items	Item Number			Specification value
	ESC	PCL	HP	
Reduced character	56	—	—	[0] (default value) : None [1] : Yes  Note <ul style="list-style-type: none"> Characters can be reduced if alphanumerics are printed.
Page length	58	—	—	[0] (default value) : 11 inches [1] : 12 inches
1 inch perforation skip	59	—	—	[0] (default value) : None [1] : Yes  Note <ul style="list-style-type: none"> You can have 1 inch between each page. This specification is enabled only if “No cut sheet feeder” is specified in “Paper position”.
Paper supply position	60	—	—	[0] (default value) : 8.5 mm [1] : 22 mm
CR function	61	—	—	[0] (default value) : Return [1] : Return line break  Note <ul style="list-style-type: none"> This is not reflected if extension command is sent. This affects the print result of 8 bit dot image print command.
HP-GL mode	—	—	150	[0] (default value) : HP-GL [1] : HP-GL/2  Note <ul style="list-style-type: none"> This affects IW, OW, and UC commands. If printing HP-GL/2 commands not including BP commands, specify “HP-GL/2”.
Hard Clip	—	—	151	[0] : Standard [2] (default value) : Paper
Ejection command	—	—	152 (SP)	[0] : OFF [1] : ON  Note <ul style="list-style-type: none"> You can specify the command to indicate the end of drawing. Drawing is ended when the command specified here is received, and paper is ejected. The default value is “ON” for SP0 and “OFF” for commands other than SP0. If multiple commands are specified, drawing is ended and paper is ejected when any of the commands is received.
	—	—	153 (SP0)	
	—	—	154 (NR)	
	—	—	155 (FR)	
	—	—	156 (PG)	
	—	—	157 (AF)	
	—	—	158 (AH)	

Items	Item Number			Specification value
	ESC	PCL	HP	
Scale	—	—	159	[0] : OFF [1] (default value) : ON
Scale mode	—	—	160	[0] (default value) : Paper size [1] : Object area
Area determination mode	—	—	161	[0] (default value) : Auto [1] : PS [2] : IW [3] : IP [4] : Adapted
Paper margin	—	—	162	[0] to [99] (default value : 0) : 0 to 99 mm
Extension specification	62	—	—	[0] (default value) : Invalid [1] : Valid  Note <ul style="list-style-type: none"> Regular extension commands specify ESC, which is 1BH in hexadecimal notation, in the beginning, followed by “;” (semicolon = 3BH) as the extension to identify commands. If ESC codes and semicolons cannot be used on the host computer, specific alternate character strings can be used as extensions.
Extension	63	—	—	[&%] (default value) : 0x21 to 0x7e  Note <ul style="list-style-type: none"> In order to be able to control with text codes, specify the extension of extension command (first 2 bytes). Enter 2 characters on the keyboard displayed on the screen.
Form composition  Note <ul style="list-style-type: none"> This is not reflected if extension command is sent. 	64	—	—	[0] (default value) : None [1] to [64] : No.1 to No.64  Note <ul style="list-style-type: none"> The form name displayed even after the form is deleted after specifying the form. In this case, the form is not composed.
Stapling	66	—	164	[0] (default value) : None [1] : 1 location on top left [2] : 2 locations on top [3] : 1 location on top right [4] : 2 locations on left [5] : 2 locations on right [6] : 1 location at bottom left [7] : 2 locations at bottom [8] : 1 location at bottom right
Hand feed paper supply pause	67	—	165	[0] : (Default value) No [1] : Yes

Items	Item Number			Specification value
	ESC	PCL	HP	
Punch	69	—	166	[0] (default value) : None [1] : Top [2] : Bottom [3] : Left [4] : Right
Number of punched holes	70	—	167	[0] (default value) : 2 holes [1] : 3 holes [2] : 4 holes
Binary data (command is entered in hexadecimal notation) specification character string	72	—	—	[0] (default value) : OFF [1] : &\$ % \$ [2] : \$?!#
0 font	73	—	—	[0] (default value) : 0 [1] : ∅
HexDump	—	214	—	[0] (default value) : OFF [1] : ON
Grey print	—	215	—	[0] (default value) : OFF [1] : ON
Line end process	—	218	—	[0] (default value) : OFF [1] : Add LF at the end [2] : Add CR at the beginning [3] : CR-xx  Note • With “CR-xx”, add LF at the end when CR and add CR at the beginning when LF/FF.
Default value for user defined paper size	—	219 (Short side)	—	[0] to [9999] (default value : 2100) : 0 to 999.9 mm
	—	220 (Long side)	—	[0] to [9999] (default value : 2970) : 0 to 999.9 mm
Effective number of outputs	74	221	115	[0] (default value : HP-GL/2) : Protocol specification [1] : Panel [2] (default value : ESC/P, PCL) : Command
Barcode mode	75	—	—	[0] (default value) : Regular mode [1] : Barcode mode  Note • Barcode outlines are clearly printed in the barcode mode.

Items	Item Number			Specification value
	ESC	PCL	HP	
Applicable product	—	—	169	[0] (default value) : HP750C [1] : FX4036
Pen width	—	—	800 to 815	Item Number for No.00 is 800. [0] to [255] (default value : 3) : 0 to 25.5 mm
Pen end shape	—	—	850 to 865	Item Number for No.00 is 850. [0] (default value) : Cut  [1] : Round  [2] : Rectangle 
Pen connection shape	—	—	900 to 915	Item Number for No.00 is 900. [0] (default value) : None  [1] : Cross  [2] : Round  [3] : Cut 
Pen color	—	—	950 to 965	Item Number for No.00 is 950. [0] to [255] : 0 to 255 (color)  Note • This setting is valid for color printers.
Pen intensity			950 to 965	Item Number for No.00 is 950. [0] to [100] : 0 to 100 (intensity)  Note • This setting is valid for black and white printers.

Direct Print

This function is used to print files directly by using lpr commands, etc. instead of a printer driver.

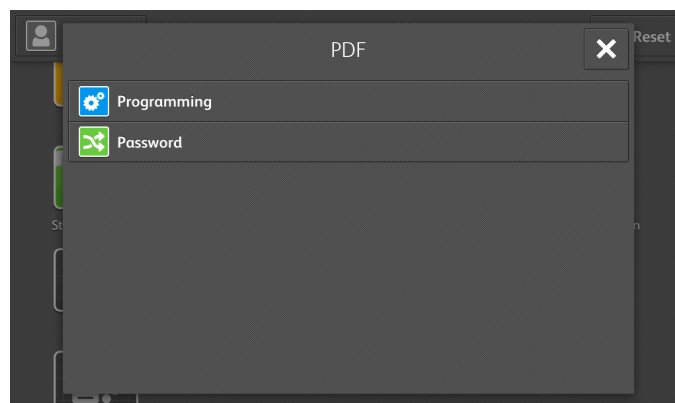
There are two types of PDF direct print, including Adobe genuine PDF direct print and Fuji Xerox Co., Ltd. PDF direct print (PDF Bridge).

Note

- In order to use Adobe genuine PDF direct print, you need the Adobe® PostScript® 3™ kit.
- To use lpr commands, go to [Device] > [Connectivity & Network Setup] > [Port Settings] > [LPD] and specify [Enabled] for [Port Status].

Mode menu screen

This screen is displayed when the direct print mode is selected on the [Print Mode] on the home screen.



Note

- You can follow the same procedure for the PDF emulation mode with CentreWare Internet Services.

■ Programming

Enter the Item Number for the function in [Item Number] to display the current setting.

Enter the new value in [New Value] and tap on [Save] to change the setting.

If you are printing a PDF file without using Fuji Xerox Co., Ltd. ContentsBridge Utility, this setting becomes valid.

Note

- If you are printing a PDF file with ContentsBridge Utility, refer to [Support Tools/Manuals] > [Media Information] in "Software/Product Manual DVD".
- If using Contents Bridge Utility, only "Print process mode" will be enabled.

Refer

- Refer to "Items" (p.27) for Item Number.







■ Password

If you set up a password, you can print PDF files secured with a password.

Note

- The password should be 32 or fewer alphanumeric or symbols.
- Depending on the PDF file security setting, the file may not be printable.

Items

Items	Item Number		Specification value
	PDF	DocuWorks	
Number of outputs	401	501	[1] to [999] (default value : 1) : 1 to 999  Note <ul style="list-style-type: none"> If printing using lpr commands, the specification of the number of outputs is made with lpr commands. Due to this, this setting will be invalid.
2 sided	402	502	[0] (default value) : None [1] : Long side binding [2] : Short side binding
Print mode	403	503	[0] (default value) : Standard [1] : High speed [2] : High resolution
Sort	404	504	Sort multiple copies by copy (1, 2, 3... 1, 2, 3...). [0] (default value) : None [1] : Yes
Layout  Note <ul style="list-style-type: none"> Setting of this item is enabled only if “PDF Bridge” is specified in “Print process mode”. 	405	505	[0] (default value) : Auto scale [1] : Catalog (bookbinding) [2] : 2 pages [3] : 4 pages [4] : 100 % (scale)  Note <ul style="list-style-type: none"> “Catalog (bookbinding)” is enabled for PDF direct print. Catalog (bookbinding) print is not valid with some page structures. In this case, it is printed in “Auto scale”.
Paper size	406	506	[0] (default value) : Auto [1] : A4
Color mode  Note <ul style="list-style-type: none"> This setting is valid for color printers. 	407	507	[0] (default value) : Auto [1] : Black and white
Print process mode  Note <ul style="list-style-type: none"> This is displayed when Adobe® PostScript® 3™ kit is equipped. 	408	—	[0] (default value) : PDF Bridge [1] : PS  Note <ul style="list-style-type: none"> “Layout” setting becomes invalid if “PS” is specified.

Web Applications

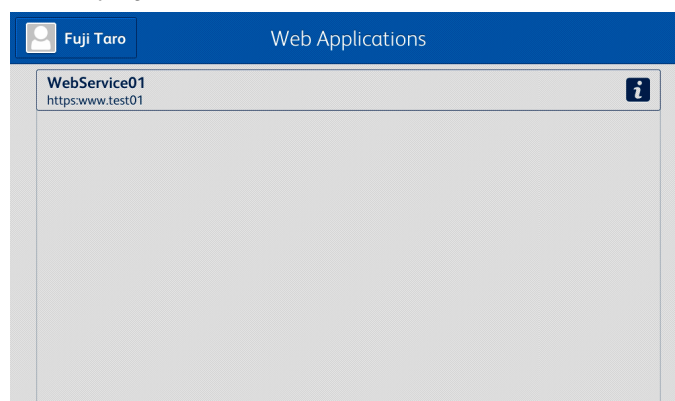
This function allows you to access Web servers via networks from the browser included with this product in order to store or display data.

- Access an external service and display an external service screen
- Store a scanned document in a folder on a Web application
- Print a file stored in an external server

Note

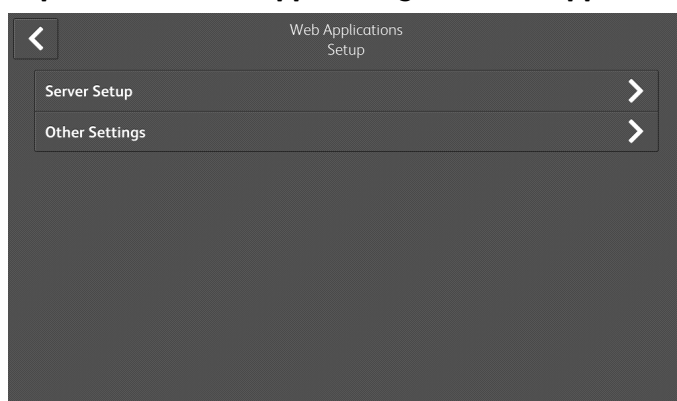
- Web applications that can be displayed are only those which have been linked. You cannot access sites on the internet.

Tap on [Web Applications] to display.

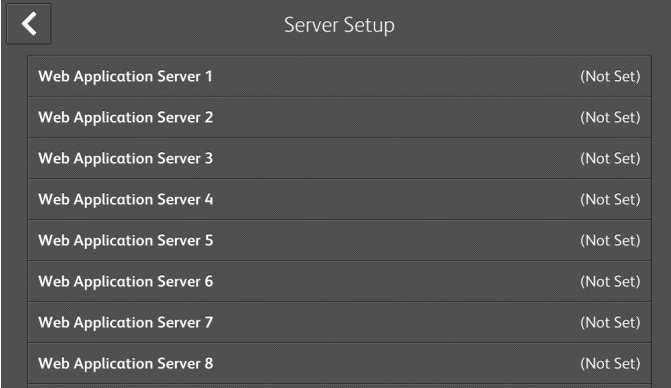


Server Setup

1. Log into the device administrator mode.
2. Tap on [Device] > [App Settings] > [Web Applications Setup] > [Server Setup].



3. Select the server number to register.



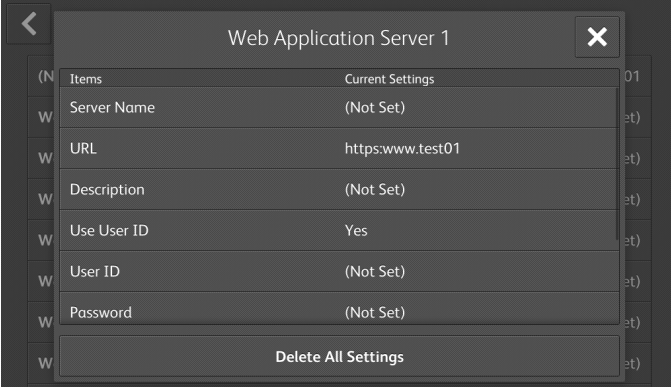
Server Setup	
Web Application Server 1	(Not Set)
Web Application Server 2	(Not Set)
Web Application Server 3	(Not Set)
Web Application Server 4	(Not Set)
Web Application Server 5	(Not Set)
Web Application Server 6	(Not Set)
Web Application Server 7	(Not Set)
Web Application Server 8	(Not Set)

4. Enter the server URL and tap on [OK].

Note

- When connecting by specifying the Web browser version for Web Applications, specify the version between the protocol type (http, https, etc.) and the colon. For example, enter “http-v4://www.example.com” for V4 connection.
- If you connect by specifying URL as the Web browser version, the setting for [Web Applications Version] will be invalid.

5. Specify the following items as necessary.



Web Application Server 1	
Items	Current Settings
Server Name	(Not Set)
URL	https://www.test01
Description	(Not Set)
Use User ID	Yes
User ID	(Not Set)
Password	(Not Set)
Delete All Settings	

Server Name

Specify the displayed name for the connection destination.

URL

Server URL is displayed.

Description

Specify the description for the connection destination.

Use User ID

Specify whether or not to use user ID to access external services.

Note

- Even if you specify [No], user ID and password may be required at the time of access.
- If you select [No] in [Device] > [Authentication/Accounting] > [Authentication/Security Settings] > [Authentication] > [Login Type] > [Log In to Remote Accounts], it will access the external service by using the user information authenticated in this product.
- You can specify whether or not to display authentication screen when accessing an external service in [Device] > [App Settings] > [Web Applications Setup] > [Other Settings] > [When Sending User Details].

User ID

Specify the user ID for authentication in external services.

Note

- Depending on the external service, the setting may be invalid even if you specify [User ID]. Check the setting for the used external service.

Password

Specify the password for authentication.

Notify Device/Authentication

You can specify whether or not to notify the information to identify this device and the certificate information of the user to the connection destination every time you connect to an external service.

Note

- Whether or not such information will be used is determined by the connecting external service, so you normally would not perform the setting on the operation panel.

Notify Authorization Info

You can specify whether or not to notify the authorization information of the user to the connection destination every time you connect to an external service.

Functional Code

You can specify this as necessary when using the linked service with another device.

Server Certificate Verification

If the setting is to verify the server certificate when connecting with an external server (ASP) in the same manner as Windows Web browser, you can prevent phishing.

To verify a server certificate, the route certificate (CA certificate) for the route certificate agency issuing the server certificate is used.

Note

- CA certificate files are compatible with the following formats.
 - DER encoded binary X.509 format (.CER)
 - Base64 encoded X.509 format (.CER)
 - Cryptographic Message Syntax Standard - PKCS #7 certificate format (.P7B)

Encryption and Signature Function

Certificate

A certificate is required to use the encryption and signature functions.

Creation/deletion of a certificate, import/export, and validation are done with CentreWare Internet Services.



- Refer to CentreWare Internet Services help for procedures.

Types of certificate

- Self certificate created with CentreWare Internet Services
- Certificate signed by a certificate agency (CA)

Standard for electronic certificate that can be imported

- X.509 (DER/PEM format)
- PKCS#12 (DER/PEM format)
- PKCS#7 (DER/PEM format)

Available device certificate

✓ : Valid, - : Not valid

Encryption and signature function	Self certificate	Certificate generated by another certificate agency
SSL/TLS server	✓	✓
SSL/TLS client	-	✓
IPsec	-	✓ *
S/MIME	-	✓
Scanned document	✓	✓

* : Used when [IKE Authentication Method] is [Authenticate by Digital Signature].

Terms for valid certificate

✓ : Valid, - : Not valid

Encryption and signature function	Key use		Extension key use			Email address
	Key encryption	Digital signature	Server authentication	Client authentication	Email protection	
SSL/TLS server	✓	✓	✓	-	-	-
SSL/TLS client	✓	✓	-	✓	-	-
IPsec	-	✓	-	-	-	-
S/MIME	✓	✓	-	-	✓	✓
Scanned document	✓	✓	-	-	-	-

Encryption and Signature Function

■ SSL/TLS server

SSL/TLS protocol is used to encrypt HTTP communication from client PC to this product.

It is encrypted in SSL even when printing by using IPP protocol.

■ SSL/TLS client

SSL/TLS protocol is used to encrypt HTTP communication from this product to an external server.

Although it is not normally necessary to import a self certificate, you can import a certificate generated by another certificate agency if the external server requires SSL client proof.

To verify an external server, import the certificate of the upper level certificate agency included in the certificate path.

■ IPsec

IPsec protocol is used for encryption.

It is encrypted on the IP level, regardless of the application.

Depending on the status of [Device] > [Connectivity & Network Setup] > [Security Settings] > [IPsec Settings] > [IKE Authentication Method], requirement for IPsec certificate will differ.

- Authenticate by digital signature
Import a certificate generated by another certificate agency.
- Authenticate by prior shared key
Not required.

To verify the communication destination, import the certificate of the upper level certificate agency included in the certificate path.

■ S/MIME

S/MIME is used to encrypt emails and internet FAX.

S/MIME certificate is required.

Encrypted communication requires the transmission destination individual certificate, device certificate, and this product's device certificate.

[Device] > [App Settings] > [Scan Settings] > [Email Control] > [Split by Data Size] is not available.

Note

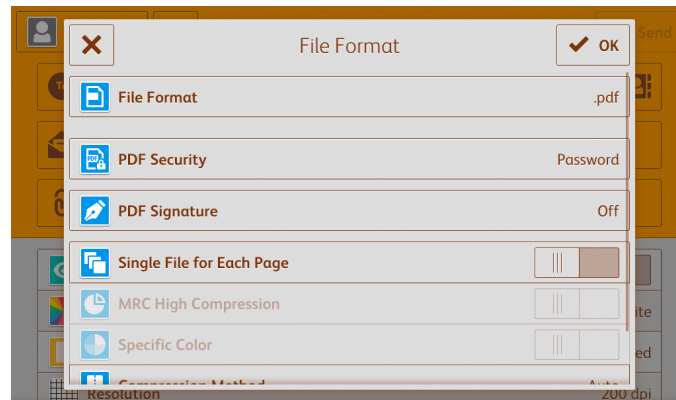
- Check that the [Details] tab has the following setting on the [Certificate] screen for the S/MIME individual certificate and device certificate.
 - Email address has been set
 - If the certificate contains V3 extension (KeyUsage) in RSA method
"Digital signature" and "key encryption bit" have been set in [Key usage]
 - If the certificate contains V3 extension (KeyUsage) in ECC method
"Digital signature" and "key encryption bit" have been set in [Key usage]

■ Scanned document

Scanned documents that allow digital signature are PDF and DocuWorks.

Import a certificate generated by another certificate agency.

Specify encryption in [File Format] when scanning.



Setting Restore Tool

This function is used to backup setting data, etc. in computers connected through networks in case data is lost due to the device's storage malfunction.

For more information, contact your local Fuji Xerox representative.

License

This product contains open source software, for which third parties own the rights (hereinafter referred to as "OSS"). For applicable license, copyright display, and individual license terms for each OSS, please refer to [License] in [Support Tools/Manuals] > [Model-specific Manual] within the attached "Software/Model-specific Manual" disk.

This product contains software consented based on OSS licenses, such as GNU Library General Public License 2.0.

If you wish to obtain the source code for the target software based on the OSS license, you can do so from the site below.

https://www.fujixerox.co.jp/etc/oss/mfp/ap_c7070/v1_0

New Zealand FAX modem statements

General

"The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services"

"This equipment does not fully meet Spark's impedance requirements. Performance limitations may occur when used in conjunction with some parts of the network. Telecom will accept no responsibility should difficulties arise in such circumstances."

"This equipment shall not be set up to make automatic calls to the Telecom '111' Emergency Service."

"If a charge for local calls is unacceptable, the 'Dial' button should NOT be used for local calls. Only the 7-digits of the local number should be dialled from your telephone. DO NOT dial the area code digit or the '0' prefix."

"This equipment may not provide for the effective hand-over of a call to another equipment connected to the same line."

Important Notice

"Under power failure conditions, this telephone may not operate. Please ensure that a separate telephone, not dependent on local power, is available for emergency use."

"Some parameters required for compliance with Spark's Telepermit requirements are dependent on the equipment (PC) associated with this equipment. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specification :

There shall be no more than 10 call attempts to the same number within any 30-minute period for any single manual call initiation, and the equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next attempt.

Where automatic calls are made to different numbers, the equipment shall go on-line for a period of not less than 5 seconds between the end of one attempt and the beginning of the next attempt.

The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing."

"All persons using this device for recording telephone conversations shall comply with New Zealand law. This requires that at least one party to the conversation is to be aware that it is being recorded. In addition, the Principles enumerated in the Privacy Act of 1993 shall be complied with in respect to the nature of the personal information collected, the purpose for its collection, how it is used and what is disclosed to any other party."