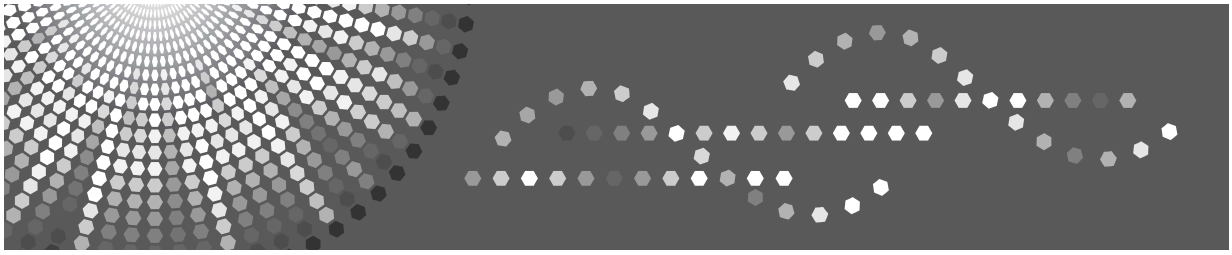

# IPDS Supplement


1 Getting Started

2 Using Web Image Monitor

3 Accessing User Tools

4 Appendix


Read this manual carefully before you use this product and keep it handy for future reference.

### Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

### Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

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# Manuals for the IPDS card

Refer to the manuals that are relevant to what you want to do with the IPDS card.

**Important**

❒ Adobe Acrobat Reader/Adobe Reader must be installed in order to view the manuals as PDF files.

❖ **IPDS Supplement**
Explains about how to configure the IPDS card for the machine, and about items selectable from the Web browser.

❖ **IPDS Printing Configuration Guide (IPDS_CONF.pdf) *English Only**
Explains about environment necessary for connecting the mainframe to the machine, and performing IPDS printing.

❖ **IPDS Technical Reference (IPDS_TEC.pdf) *English Only**
Explains about commands necessary for IPDS printing.

**Note**

❒ For details about the necessary environment, and installation of the IPDS card and machine, consult your sales or service representative. For details about necessary environment and operation of the mainframe, consult IBM.

# How to Read This Manual

## Symbols

This manual uses the following symbols:

**Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

**Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

**Reference**

This symbol is located at the end of sections. It indicates where you can find further relevant information.

**[ ]**

Indicates the names of keys that appear on the machine's display panel.

**【 】**

Indicates the names of keys on the machine's control panel.

## About IPDS

IPDS (Intelligent Printer Data Stream) is a page printing format for IBM mainframe and client computers. This machine can perform IPDS printing if the IPDS card is installed.

# 2. Using Web Image Monitor

## List of the Setting Items

If you install the IPDS card to the machine, following Web Image Monitor items can be viewed or modified depending on the selected mode on the Web browser.

Select one of the following modes to log on Web Image Monitor:

- User mode: logged on as a user
- Administrator mode: logged on as an administrator

**Note**

❒ For details about Web Image Monitor, see the manual explaining the network functions provided by the supplier or Web Image Monitor Help.

### Configuration

#### Printer

| Menu | User mode | Administrator mode |
|---|---|---|
| Printer Basic Settings | Read | Read/Modify |
| IPDS Form List | Read | Read/Modify |
| Reset IPDS Fonts | None | Read/Modify |

**Note**

❒ "IPDS Menu" will appear in Printer Basic Settings.

#### Network

| Menu | User mode | Administrator mode |
|---|---|---|
| IPv4 | Read | Read/Modify |

**Note**

❒ "IPDS" and "IPDS Port Number" will be displayed.

#### Security

| Menu | User mode | Administrator mode |
|---|---|---|
| Network Security | None | Read/Modify |

**Note**

❒ "IPDS" will be displayed.

## User Tools Settings

When the IPDS card is installed, IPDS print settings become available and will appear on the control panel.

### ❖ List / Test Print

- IPDS Font List
  Prints a list of IPDS-supported fonts.

**Note**

❒ The layout of the IPDS Font List produced by the test print is fixed to A4 or $8^1/_2$" × 11" (letter) size. We recommend you load A4 or $8^1/_2$" × 11" (letter) size paper (plain or recycled) in one of the paper trays.

❒ For details about printing lists, see the manual explaining how to print lists provided by the supplier.

### ❖ Maintenance

- Reset IPDS Fonts
  Use this page to delete all IPDS captured fonts.

**Note**

❒ Only the Machine Administrator can reset IPDS fonts.

### ❖ IPDS Menu

| Menu Item | Description |
|---|---|
| Tray Form | Specifies an IPDS form for each paper tray.<br>• Tray 1<br>• Tray 2<br>• Tray 3<br>• Tray 4<br>• Tray 5<br>• Tray 6<br>• Tray 7<br>• Interposer Upper Tray<br>• Interposer Lower Tray<br>For each paper tray, select the form you want to allocate to it. |
| Emulation Mode | Specifies the emulation mode.<br>• Native (Default)<br>• 4028 |

| Menu Item | Description |
|---|---|
| Print Mode | Specifies the print mode.<br>• Standard<br>• Enhanced (Default) |
| Default Code Page | Specifies the default code page. The default value is "37".<br>37 : US, Canada, Netherlands, Portugal<br>38 : US English ASCII<br>260 : Canadian French<br>273 : Austrian/German<br>274 : Belgium<br>276 : Canadian French<br>277 : Danish/Norwegian<br>278 : Finnish/Swedish<br>280 : Italian<br>281 : Japanese<br>284 : Spanish<br>285 : UK English<br>286 : Austrian/German (alternate)<br>287 : Danish/Norwegian (alternate)<br>288 : Finnish/Swedish (alternate)<br>290 : Japanese/Katakana<br>297 : French<br>420 : Arabic<br>423 : Greek<br>424 : Hebrew<br>500 : Belgium, Switzerland / International<br>870 : Latin 2 Multilingual<br>871 : Icelandic<br>875 : Greek<br>880 : Cyrillic<br>892 : OCR - A<br>893 : OCR - B<br>905 : Turkish<br>1025 : Cyrillic<br>1026 : Turkish |

| Menu Item | Description |
|---|---|
| Default Code Page | The following code pages include the Euro character:<br>• 1140 : US, Canada, Netherlands, Brazil, Portugal<br>• 1141 : Austrian/German<br>• 1142 : Danish/Norwegian<br>• 1143 : Finnish/Swedish<br>• 1144 : Italian<br>• 1145 : Spanish<br>• 1146 : UK English<br>• 1147 : French<br>• 1148 : Belgium, Switzerland/International<br>• 1149 : Icelandic |
| Default FGID | Specifies the default FGID (Font Typeface Global Identifier), which identifies the printer's default resident font. The default FGID is 416 (Courier 10 point).<br>To display a list of the fonts and FGIDs that the printer supports, print out the list of IPDS resident fonts. For details about printing lists, see the manual explaining how to print lists provided by the supplier.<br>3 : OCR B<br>11 : Courier 10<br>12 : Prestige Pica<br>18 : Courier Italic 10<br>19 : OCR A<br>46 : Courier Bold 10<br>85 : Courier 12<br>86 : Prestige Elite<br>92 : Courier Italic 12<br>111 : Prestige Elite Bold<br>112 : Prestige Elite Italic<br>159 : Boldface<br>164 : Prestige PSM Roman Medium<br>203 : Gothic Text<br>221 : Prestige 15<br>223 : Courier 15<br>254 : Courier.17 ss<br>256 : Prestige 17<br>281 : Letter Gothic<br>283 : Gothic Text<br>290 : Gothic Text |

| Menu Item | Description |
|---|---|
| Default FGID | 304 : Katakana Gothic<br>305 : OCR A<br>306 : OCR B<br>318 : Prestige Bold<br>319 : Prestige Italic<br>400 : Letter Gothic<br>404 : Letter Gothic Bold<br>416 : Courier Roman Medium 10<br>420 : Courier Roman Bold<br>424 : Courier Italic Medium<br>428 : Courier Italic Bold<br>432 : Prestige<br>2304 : Helvetica Roman Medium<br>2305 : Helvetica Roman Bold<br>2306 : Helvetica Italic Medium<br>2307 : Helvetica Italic Bold<br>2308 : Times New Roman Medium<br>2309 : Times New Roman Bold<br>2310 : Times New Roman Italic Medium<br>2311 : Times New Roman Italic Bold<br>5687 : Times Roman<br>5707 : Times Roman Bold<br>5815 : Times Roman Italic<br>5835 : Times Roman Bold Italic<br>20224 : Boldface |
| Characters Per Inch | Specifies the number of characters per inch (pitch) for the default font. Valid values are 5.0 to 30.0 in units of one tenth of an inch. The default value is 10.0. |
| Valid Printable Area Check | Turns valid printable area checking on or off.<br>• On (Default)<br>The printer checks for pixels that fall outside the intersection of the logical and physical pages. If there are pixels outside the area and error reporting has been set using the "IPDS Exception Handling Control" command, the printer reports an error to the host.<br>• Off<br>The printer does not report pixels outside the valid printable area. |

| Menu Item | Description |
|---|---|
| Page | Specifies how data is positioned on the page.<br>• Whole (Default)<br>IPDS whole page. The printer does not move or compress the page. This is the preferred method; all page positioning and formatting is done at the application level on the host. The **[Print]**, **[Comp1]**, and **[Comp2]** commands may alter the appearance of the page, or may not be compatible with earlier products (for example, 3116, 3916), especially if these options are used in combination with duplex and other IPDS Menu page format adjustments. The **[Print]**, [**Comp1]**, and **[Comp2]** commands are included to allow line printer jobs to fit onto pages where "Edge to Edge" printing is not possible; we do not recommend you use them to create new applications.<br>• Comp1<br>This command uses the "Print Page" command as its base, and compresses the spacing between text lines generated by the "IPDS Begin Line" command. Its primary purpose is to compress "Begin Line" command text data onto pages that have unprintable borders.<br>• Comp2<br>This command uses the "Print Page" command as its base, and compresses "IPDS Begin Line" command text (see Comp1) and the data of the following vertical text positioning commands: "Absolute Move Baseline", "Relative Move Baseline", "Draw B Axis Rule", and "Draw I Axis Rule".<br>**Note**<br>❒ Alignment problems can occur if you select **[Comp1]** or **[Comp2]**, and print jobs that mix text with images, graphics, or bar codes. Problems can occur if text positioning commands are used to move across text or into non-text (image, graphic, or bar code) areas. Both **[Comp1]** and **[Comp2]** reduce the line spacing of text only and have no effect on non-text data. To minimize alignment problems, select **[Comp1]**, because "Begin Line" commands are not normally used to move across or into non-text areas. If, however, the application you want to compress does not use the "Begin Line" command, select **[Comp2]**. |

| Menu Item | Description |
|---|---|
| Page | • Print<br>IPDS print page. If the page origin is within the unprintable area, the origin of the page is moved to the inside edge of the nearest unprintable area border. If the origin violates the unprintable area on two edges, it is moved to the nearest inside corner of the unprintable area. If the origin violates only one edge of the unprintable area, the origin is adjusted to avoid that area only.<br>If a location adjustment is made, the printed page is shifted in the direction of the adjustment. There is no compression, so data on the opposite edge may be pushed off the page.<br>**Note**<br>❒ For the "Print" command to function, the **[Edge to Edge]** setting must be set to **[Off]**. Any data placed in this unprintable area is lost. Also, **[Print]** will not function on media overlays (overlays that are part of the base page, not the overlays included in the variable print data). |
| Edge to Edge | Turns "Edge to Edge" printing on or off.<br>• On<br>The printer allows printing up to the physical page size.<br>• Off (Default)<br>The printer maintains a border of 2 mm (0.078 in) on the leading edge, but prints to all other page borders.<br>**Note**<br>❒ prevent toner accumulating inside the printer, we recommend leaving **[Edge to Edge]** set to **[Off]** for IPDS, and setting it to **[On]** only when necessary.<br>❒ The "Edge to Edge" IPDS Menu item affects IPDS data only.<br>❒ When using IPDS, the "Edge to Edge" setting on System menu will be invalid. |
| Font Substitution | Turns font substitution on or off.<br>• On<br>If a job requests a font that is not loaded on the printer, the printer uses a substitute font.<br>• Off (Default)<br>If a job requests a font that is not loaded on the printer, the printer generates an IPDS NACK (Negative Acknowledgement) message and the host holds the job. |

| Menu Item | Description |
|---|---|
| Caching | Specifies whether or not to use caching for repeated overlays.<br>• On<br>The printer uses caching, which provides better performance for jobs with repeated overlays, but uses more memory.<br>• Off (Default)<br>The printer does not use caching, which requires less memory but provides less performance for jobs with repeated overlays.<br>**Note**<br>❒ Overlay caching is recommended for repeated overlays. Overlay caching does not improve performance with non-overlay IPDS data or overlays that are used only once or infrequently. |
| Font Capture | Sets Font Capture processing:<br>• On (Default)<br>The printer saves downloaded font resources on its hard disk drive for use beyond the duration of the current power cycle. The IPDS host must provide the "Activate Resource" command with the correct resource identifiers before downloading the font resource to be captured.<br>• Off<br>The printer stores downloaded font resources for the duration of one power cycle only. |

| Menu Item | Description |
|---|---|
| Resolution | Specifies the resolution reported to the host in the "IPDS XOA-OPC" command for raster coded fonts and IM1 image support. The **[Resolution]** menu item also helps determine whether or not a printer-resident raster font is used. For example, 240 dpi raster fonts are activated at the **[240 dpi]** setting, not at **[300 dpi]** or **[600 dpi]**. The **[Resolution]** setting does not affect outline fonts, nor does it determine which raster fonts can be downloaded to the printer as temporary activation fonts.<br>• Auto<br>Reports to the host that the printer supports raster fonts of any dpi value and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.<br>• 240 dpi<br>Reports to the host that the printer supports 240 dpi raster fonts and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.<br>• 300 dpi (Default)<br>Reports to the host that the printer supports 300 dpi raster fonts and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.<br>• 600 dpi<br>Reports to the host that the printer supports 600 dpi raster fonts and IM1 images. "Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.<br>**Note**<br>❒ If you select **[Standard]** for the **[Print Mode]** setting, the resolution changes to **[300 dpi]**.<br>❒ To set the IPDS resolution to **[240 dpi]**, **[600 dpi]**, or **[Auto]**, you must first set **[Print Mode]** to **[Enhanced]**. Enhanced print mode produces optimal print quality; but can slow down the printing of complex jobs. |

| Menu Item | Description |
|---|---|
| Graphic Character String | Specifies the Graphic Character String (Graphic Character Sizing) processing method.<br>• Auto (Default)<br>Applies the value specified by the **[Emulation Mode]** item (**[Native]** or **[4028]**).<br>• Character Scale<br>Applies 4028 IPDS Emulation. Prints graphics and text characters by scaling the characters in a currently activated font. Character cell size is defined in the GOCA data stream. Not available for DBCS.<br>• Font Activation<br>Applies Native IPDS Emulation. Prints graphics and text characters using a currently activated font at the font's activation size, without scaling. GOCA data stream Character cell size information is ignored. |
| Bar Code | Specifies the barcode level protocol.<br>• Auto (Default)<br>Applies the value specified by the **[Emulation Mode]** item (**[Native]** or **[4028]**).<br>• 4028<br>Applies 4028 IPDS Emulation.<br>• Native<br>Applies Native IPDS Emulation. |
| Box Draw | Specifies the Box Draw processing.<br>• On<br>Uses special outline fonts to draw Symbol Set box characters. Select **[On]** to fill gaps caused by special raster fonts that contain extended length box characters (as found in older applications, for example).<br>• Off (Default)<br>Uses Symbol Set outline font characters to draw boxes as the font-defined characters. |
| Color Simulation | Allows you to select how color specification controls are processed on a monochromatic printer.<br>• Fidelity (Default)<br>The printer accepts all color specification controls and simulates unique colors with shades of gray.<br>• Legacy<br>The printer accepts all color specification controls; but performs only limited color simulation using black. |

| Menu Item | Description |
|---|---|
| Text Color Simulation | Specifies how text color specification controls are processed on a monochrome laser printer.<br>• On (Default)<br>The printer accepts all text color specification controls and simulates the unique colors with shades of gray.<br>• Off<br>The printer accepts all text color specification controls; but performs only limited color simulation using black.<br>**Note**<br>❒ This menu item is available only if **[Color Simulation]** mode is set to **[Fidelity]**. |
| Suppress Staple Count Nacks | Selects whether or not to notify the user when stapling errors occur.<br>• On<br>• Off (Default) |
| Suppress Punch Nacks | Selects whether or not to notify the user when punching errors occur.<br>• On<br>• Off (Default) |

| Menu Item | Description |
|---|---|
| Tray Mapping | Maps the media source (input tray) to an ID the host uses for the media source.<br>• Tray 1<br>  • Auto (Default)<br>  • IPDS Tray<br>• Tray 2<br>  • Auto (Default)<br>  • IPDS Tray<br>• Tray 3<br>  • Auto (Default)<br>  • IPDS Tray<br>• Tray 4<br>  • Auto (Default)<br>  • IPDS Tray<br>• Tray 5<br>  • Auto (Default)<br>  • IPDS Tray<br>• Tray 6<br>  • Auto (Default)<br>  • IPDS Tray<br>• Tray 7<br>  • Auto (Default)<br>  • IPDS Tray<br>• Interposer Upper Tray<br>  • Auto (Default)<br>  • IPDS Tray<br>• Interposer Lower Tray<br>  • Auto (Default)<br>  • IPDS Tray<br>**Note**<br>❒ If **[IPDS Tray]** is selected, enter the tray parameter replacement value for each paper tray, using up to 254 digits. |
| Corner Staple Angle | Selects **[Vertical]** or **[Slant]** for the angle of stapling.<br>• Vertical (Default)<br>Staples vertically.<br>• Slant<br>Staples diagonally. |
| Offset | Specifies whether or not the output is offset (jogged).<br>• On (Default)<br>Output is offset (jogged) when requested by the job.<br>• Off<br>Output is never offset (jogged). |

| Menu Item | Description |
|---|---|
| Default Punch Pattern | Specifies the default number of holes to punch if the punch unit provides a selection (for example, two or four holes). |

**Note**

- **[Suppress Staple Count Nacks]** and **[Corner Staple Angle]** appears if the optional staple unit is installed.
- **[Suppress Punch Nacks]** and **[Default Punch Pattern]** appears if the optional punch unit is installed.
- **[Tray Form]** and **[Tray Mapping]** appear differently depending on the options installed.
- **[Tray Form]** allocates the form specified using Web Image Monitor's **[IPDS Form List]** to the installed tray. For details about IPDS Form Settings, see the Web Image Monitor Help.
- Tray commands of **[Tray Form]** differ depending on the machine you want to use. For details about selectable tray commands, see "Load Copy Control", IPDS Technical Reference.
- For details about the control panel settings, see the manual explaining how to specify the control panel settings, provided by the supplier.

# 4. Appendix

## Precautions

### About AFP/IPDS Fonts

The AFP/IPDS Single Byte Character Set (SBCS) font is stored on the hard disk drive.

### Limitation

IPDS jobs cannot be stored on the document server.

PCL fonts are not accessible via AFP/IPDS, nor can PCL access AFP/IPDS fonts.

PostScript fonts are not accessible via AFP/IPDS, nor can PostScript access AFP/IPDS fonts.

The mainframe or host computer will not be notified of errors that happen before this machine establishes connection with them.

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