

List of Printer MIB, UPnP, and Wireless Print Document Formats

ISSUES are highlighted like this.

File: Print-MIME-tab.doc, .pdf

Date: ~~2/20/2004~~3/2/2001

Enum (decimal)	Enum (hex)	Name or <del>Acronym</del> Acronym	MIME Media Type (already registered)	Description, including full title	Reference	Company or Organization
1.	01	Other				
2.	02	Unknown				
3.	03	PCL	application/vnd.hp-PCL	Starting with PCL version 5, HP-GL/2 is included as part of the PCL language. PCL and HP-GL/2 are registered trademarks of Hewlett-Packard Company.	PCL-PJL Technical Reference Manual Documentation Package HP Part No. 5012-0330	Hewlett-Packard Company
4.	04	HPGL	application/vnd.hp-HPGL	Hewlett-Packard Graphics Language. HP-GL is a registered trademark of Hewlett-Packard Company.	The HP-GL/2 and HP RTL Reference Guide Addison-Wesley Publishing Co. ISBN: 0-201-63325-6	Hewlett-Packard Company
5.	05	<b>PJL</b>		Peripheral Job Language. Appears in the data stream between data intended for a page description language		Hewlett-Packard Co.
6.	06	PostScript (tm) Language	application/postscript	Postscript – a trademark of Adobe Systems <del>incorporated</del> which <del>incorporated</del> , which may be registered in certain jurisdictions.	RFC2046	Adobe Systems
7.	07	<b>IPDS</b>		Intelligent Printer Data Stream. Bi-	<b><i>Title: IPDS Reference</i></b>	IBM Corporation

				directional print data stream for documents consisting of data objects (text, image, graphics, bar codes), resources (fonts, overlays) and page, form and finishing instructions. Facilitates system level device control, document tracking and error recovery throughout the print process.	<i><u>Authors: David E. Stone</u></i> <i><u>Document Number: S544-3417</u></i>	
8.	08	PPDS		IBM Personal Printer Data Stream. Originally called IBM ASCII, the name was changed to PPDS when the Laser Printer was introduced in 1989		Lexmark International, Inc. www.lexmark.com
9.	09	Escape/P ESC/P		<u>ESC/P means Epson Standard Code for Printers.</u>  <u>Epson originally developed the printer language ESC/P for use with their early dot-matrix printers. Today it is supported also by Epson inkjet and laser printers as well as by many other dot-matrix printers in the market.</u>	<u><a href="ftp://ftp.epson.com/impact/ESCO/DE.TXT">ftp://ftp.epson.com/impact/ESCO/DE.TXT</a></u> <u>The Epson "ESC/P2 Reference Manual" includes ESC/P and ESC/P2, as well as a complete description of the differences in commands supported by each printer. The newest version is August 1992, but there is also an addendum, which includes the new Stylus Color commands, identified as: "Epson Stylus</u>	<u>Seiko-Epson Corporation.</u>

					<u>COLOR Programming Note" dated July 8, 1994.</u>	
10.	0A	Epson		What is this? <b>ISSUE 01: Should we deprecate this value or clarify its definition to mean ESC/P2 (see number 68, below)?</b>		<u>Sieko-Epson Corporation.</u>
11.	0B	DDIF		Digital Document Interchange Format		Digital Equipment Corp. (now Compaq)
12.	0C	<u>Interpress</u>		<b>Xerox predecessor to Postscript</b>		Xerox Corp. www.xerox.com
13.	0D	ISO 6429		Control functions for Coded Character Sets (has ASCII control characters, plus additional controls for character imaging devices.)	ISO 6429 Control functions for Coded Character Sets	ISO
14.	0E	<u>LineData</u>		<u>Line-data</u> - Lines of data as separate ASCII or EBCDIC records and containing no control functions (no CR, LF, HT, FF, etc.) For use with traditional line printers. May use CR and/or LF to delimit lines, instead of records. <b>ISSUE 02: Should we define MIME parameters to handle the variability defined in ISO DPA (and used in practice with Line Data)?</b>	ISO 10175 Document Printing Application (DPA) <b>ISSUE 03: Or should we reference the IBM documents directly?</b>	ISO
15.	0F	MODCA	<b>application/vnd.ib</b>	Mixed Object Document Content	<b>MIME Registry talks about</b>	IBM Corporation

			m.modcap  <b>ISSUE: 04</b> This value was found in the IANA MIME registry. is this the correct value?	Architecture. Definitions that allow the composition, interchange, and presentation of final form documents as a collection of data objects (text, image, graphics, bar codes), resources (fonts, overlays) and page, form and finishing instructions	MO:DCA-P. <b>ISSUE 05:</b> Is this the same as the Printer MIB enum? Yes. "P" stands for the Presentation form of MO:DCA (as opposed to the stored form)  <b><u>Title: MO:DCA Reference</u></b> <b><u>Document Number: SC31-6802</u></b>	www.ibm.com
16.	10	ReGIS		Remote Graphics Instruction Set		Digital Equipment Corp. (now Compaq)
17.	11	SCS		SNA Character String Bi-directional print data stream for SNA LU-1 mode of communication		IBM Corporation www.ibm.com
18.	12	SPDL		ISO 10180 Standard Page Description Language.	ISO 10180 Standard Page Description Language	ISO
19.	13	TEK4014				Tektronix Corp., now part of Xerox Corp.
20.	14	PDS				<b>ISSUE 06:</b> Who?
21.	15	IGP				Printronix Corp.
22.	16	CodeV		Magnum Code-V, Image and printer control language used to control impact/dot-matrix printers		QMS, Inc., Mobile AL
23.	17	DSC-DSE		Data Stream Compatible and Emulation Bi-directional print data stream for non-		IBM Corporation www.ibm.com

				SNA (DSC) and SNA LU-3 3270 controller (DSE) communications		
24.	18	WPS		Windows Printing System, Resource based command/data stream used by Microsoft At Work Peripherals		Developed by the Microsoft Corporation
25.	19	LN03		Early DEC-PPL3		Digital Equipment Corp., now Compaq
26.	1A	CCITT		Group 3 or 4 FAX.		ITU
27.	1B	QUIC		QUIC (Quality Information Code), Page Description Language for laser printers. Included graphics, printer control capability and emulation of other well-known printer.		QMS, Inc.
28.	1C	CPAP		Common Printer Access Protocol		Digital Equipment Corp. (now COMPAQ)
29.	1D	DEC-PPL		Digital ANSI-Compliant Printing Protocol		Digital Equipment Corp. (now COMPAQ)
30.	1E	SimpleText	No	Simple-text: Character coded data, including NUL, CR , LF, HT, and FF control characters. SimpleText is more complex than the text/plain in RFC 2046, section 4.1.2	See ISO 10175 Document Printing Application (DPA), Appendix F.4.13 simple-text	ISO

31.	1F	NPAP		Network Printer Alliance Protocol. This protocol has been superseded by the IEEE 1284.1.		Network Printer Alliance (NPA)
32.	20	DOC		Document Option Commands, Appears in the data stream between data intended for a page description		QMS, Inc.
33.	21	ImPRESS		Page description language originally developed for the ImageServer product line. A binary language providing representations of text, simple graphics, and some large forms (simple bit-map and CCITT group 3/4 encoded). The language was intended to be sent over an 8-bit channel and supported early document preparation languages (e.g., TeX and TROFF)		QMS, Inc.
34.	22	Pinwriter		24 wire dot matrix printer for USA, Europe, and Asia except Japan. More widely used in Germany, and some Asian countries than in US		NEC Corp.
35.	23	NPDL		Page printer for Japanese market		NEC Corp.
36.	24	NEC201PL		Serial printer language used in the Japanese market		NEC Corp.
37.	25	Automatic	application/octet-stream	Automatic PDL sensing. Automatic sensing of the interpreter language family by the printer examining the document content. Which actual interpreter language families are sensed	RFC2045,RFC2046 (extended by RFC2911, Internet Printing Protocol/1.1 Model and Semantics, for use in printing)	IETF

				depends on the printer implementation.		
38.	26	Pages		Page printer Advanced Graphic Escape Set		IBM Japan
39.	27	LIPS		<del>LBP (Laser-Beam Printer)</del> Image Processing System  <u>Analogous to CaPSL</u>  <u>LIPS supports Diablo 630 (the factory setting for the command mode), ISO mode (for printing text data and raster graphics) and VDM mode (for vector graphics and character printing)</u>		Canon
40.	28	TIFF	image/tiff image/tiff;faxbw image/tiff;faxcolor	Tagged Image File Format	RFC2302	Aldus (now Adobe Systems Incorporated)
41.	29	Diagnostic		A hex dump of the input to the interpreter	RFC 1759	IETF
42.	2A	PSPrinter		The PostScript Language used for control (with any PDLs)		Adobe Systems Incorporated
43.	2B	CaPSL		Canon Print Systems Language  <u>Another name for this emulation is LIPS (Laser-beam Image Processing System).</u>		Canon
44.	2C	EXCL		Extended Command Language		Talaris Systems Inc.
45.	2D	LCDS		Line Conditioned Data Stream		Xerox

46.	2E	XES		Xerox Escape Sequences		Corporation Xerox Corporation
47.	2F	PCLXL	application/vnd.hp-PCLXL	Printer Control Language eXtended Language features for printing, and printer control	MIME Registry has: Specification by example: Within a Windows application select: Print and select as the printer HP 'LaserJet 5/5M - Enhanced Driver' (this driver is available from www.hp.com). Select: 'Print to File' and then 'Okay'	Hewlett-Packard Co.
48.	30	ART		Advanced Rendering Tools (ART). Page Description language originally developed for the Laser Press printers.	Technical reference manual: "ART IV Reference Manual", No F33M	Fuji Xerox Co., Ltd.
49.	31	TIPSI		Transport Independent Printer System Interface (ref. IEEE Std. 1284.1)	IEEE Std. 1284.1	IEEE
50.	32	Prescribe		Page description and printer control language. It can be described with ordinary ASCII	Technical reference manual: "PRESCRIBE II Programming Manual"	Kyocera
51.	33	LinePrinter		A simple-text character stream which supports the control codes LF, VT, FF, and plus Centronics or Dataproducts Vertical Format Unit (VFU) language is commonly used on many older model line and matrix printers.		
52.	34	IDP		Imaging Device Protocol		Apple Computer.



53.	35	XJCL		Xerox Job Control Language (JCL). A Job Control language originally developed for the LaserPress printers and is capable of switching PDLs.	Technical reference manual: "ART IV Reference Manual", No F33M	Fuji Xerox Co., Ltd.
54.	36	PDF	application/pdf	Adobe Portable Document Format	Version 1.0: Portable Document Format Reference Manual, Adobe Systems, Inc, Addison-Wesley Publishing Co. ISBN 0-201-62628-4, 1993. Version 1.1: An Adobe Systems, Inc Technical Note	Adobe Systems, Inc.
55.	37	RPDL		Ricoh Page Description Language for printers.	Technical manual "RPDL command reference" No.307029	RICOH, Co. LTD
56.	38	IntermecIPL		Intermec Printer Language for label printers.	Technical Manual: "IPL Programmers Reference Manual"	Intermec Corporation
57.	39	UBIFingerprint		An intelligent basic-like programming language for label printers.	Reference Manual: "UBI Fingerprint 7.1", No. 1-960434-00	United Barcode Industries
58.	3A	UBIDirectProtocol		An intelligent control language for label printers.	Programmers Guide: "UBI Direct Protocol", No. 1-960419-00	United Barcode Industries
59.	3B	Fujitsu		Fujitsu Printer Language	Reference Manual: "FM Printer Sequence" No. 80HP-0770	FUJITSU LIMITED

The following Print Document Formats have been proposed ~~for use in a wireless Basic Print Profile with the following additional enum values assigned. They need to~~ for registration with IANA and should be added to the Printer MIB as well.

Enum	Enum	Name or	MIME Media Type	Description, including full title	Reference	Company or
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(decimal)	(hex)	Acronym Acronym	(already registered)			Organization
60.	3D	vCard	text/directory		RFC2426	International Mail Consortium www.imc.org
61.	3E	vCal	text/calendar		RFC2445	International Mail Consortium www.imc.org
62.	3F	vNote			Infrared Data Association, IrMC (Ir Mobile Communications) Specification with Published Errata, Version 1.1, February 1999	International Mail Consortium www.imc.org
63.	40	vMessage			Infrared Data Association, IrMC (Ir Mobile Communications) Specification with Published Errata, Version 1.1, February 1999	International Mail Consortium www.imc.org
64.	41	HTML	text/html	The 'text/html' Media Type	RFC 2854, The 'text/html' Media Type. D. Connolly, L. Masinter. June 2000.	IETF www.ietf.org
65.	42	XHTML	application/xhtml+xml (Internet-Draft only)	The Extensible HyperText Markup Language		W3C w3c.org
66.	43	XHTML-Basic	no separate MIME registry planned See draft-baker-	XHTML Basic		W3C w3c.org

			xhtml-media-reg-00.txt  ISSUE_07: Or do we need a separate MIME Registry entry?			
67.	44	XHTML-Print	application/vnd.pwg-xhtml-print+xml	XHTML™ - Print		PWG (Don Wright to register)
<del>67-68.</del>	45	ESC/P2		<p><u>ESC/P2 means Epson Standard Code for Printers, Level 2.</u></p> <p><u>ESC/P2 is an enhancement of ESC/P with new functions for font scaling, raster graphic printing and more.</u></p> <p>ISSUE 08: or should ESC/P2 use the 10 value above?</p>	<p><u><a href="ftp://ftp.epson.com/impact/ESCO_DE.TXT">ftp://ftp.epson.com/impact/ESCO_DE.TXT</a></u></p> <p><u>The Epson "ESC/P2 Reference Manual" includes ESC/P and ESC/P2, as well as a complete description of the differences in commands supported by each printer.</u></p> <p><u>The newest version is August 1992, but there is also an addendum, which includes the new Stylus Color commands, identified as: "Epson Stylus COLOR Programming Note"</u></p>	<u>Sieko-Epson Corporation</u>

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					<u>dated July 8, 1994.</u>	
<u>67.69.</u>	<u>46</u>	<u>ditroff</u>		<u>Device-independent troff (ditroff). An ASCII description of a typeset document. The description specifies the typesetting device, the fonts, and the point sizes of characters to be used, as well as the position of each character on the page.</u>	<u>AIX Version 4 Files Reference</u>	<u>IBM</u>
<u>67.70.</u>	<u>47</u>	<u>d630</u>		<u>Originally used with daisywheel printers and typewriters. Supports tabulation, line and character spacing, attribute selection (bold, double-strike, underline), horizontal movement in both directions, proportional spacing and automatic centering and justification among others. This emulation is sometimes used as a basis for other, vendor specific, emulations.</u>		<u>Diablo?</u>
<u>67.71.</u>	<u>48</u>	<u>gif</u>	<u>image/gif</u>		<u>[RFC2045, RFC2046]</u>	
<u>67.72.</u>	<u>49</u>	<u>jpeg</u>	<u>image/jpeg</u>		<u>[RFC2045, RFC2046]</u>	
<u>67.73.</u>	<u>4A</u>	<u>kgl</u>		<u>KGL is a superset of postscript supported by Kodak/Heidleberg's</u>		<u>Kodak? Heidleberg?</u>

				<u>printers</u>			
<u>67.74.</u>	<u>4B</u>	<u>sap</u>		<u>OTF data stream. (composed data)</u>	<u>R/3 System Generic Output Format SAPGOF</u>	<u>SAP AG</u>	
<u>67.75.</u>	<u>4C</u>	<u>sap-abap</u>		<u>SAP Advanced Business Application Programming (line data)</u>	<u>R/3 System Generic Output Format SAPGOF</u>	<u>SAP AG</u>	