PWG Media Standardized Names 2.0 (MSN2)

Status: Approved

Abstract: This document defines standard colorant and media names and naming conventions to be used by other PWG specifications. These lists of names are a superset of the names that are defined in the Printer MIB [RFC3805] and various Internet Printing Protocol documents.

This document is a PWG Candidate Standard. For a definition of a "PWG Candidate Standard", see:

ftp://ftp.pwg.org/pub/pwg/general/pwg-process20.pdf

This document is available electronically at:

ftp://ftp.pwg.org/pub/pwg/candidates/cs-pwgmsn20-20130328-5101.1.docx

ftp://ftp.pwg.org/pub/pwg/candidates/cs-pwgmsn20-20130328-5101.1.pdf

Copyright © 2004, 2011-2013 The Printer Working Group. All rights reserved.

This document may be copied and furnished to others, and derivative works that comment on, or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice, this paragraph and the title of the Document as referenced below are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the IEEE-ISTO and the Printer Working Group, a program of the IEEE-ISTO.

Title: *PWG Media Standardized Names 2.0 (MSN2)*

The IEEE-ISTO and the Printer Working Group DISCLAIM ANY AND ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED INCLUDING (WITHOUT LIMITATION) ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

The Printer Working Group, a program of the IEEE-ISTO, reserves the right to make changes to the document without further notice. The document may be updated, replaced or made obsolete by other documents at any time.

The IEEE-ISTO takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights.

The IEEE-ISTO invites any interested party to bring to its attention any copyrights, patents, or patent applications, or other proprietary rights which may cover technology that may be required to implement the contents of this document. The IEEE-ISTO and its programs shall not be responsible for identifying patents for which a license may be required by a document and/or IEEE-ISTO Industry Group Standard or for conducting inquiries into the legal validity or scope of those patents that are brought to its attention. Inquiries may be submitted to the IEEE-ISTO by e-mail at: ieee-isto@ieee.org.

The Printer Working Group acknowledges that the IEEE-ISTO (acting itself or through its designees) is, and shall at all times, be the sole entity that may authorize the use of certification marks, trademarks, or other special designations to indicate compliance with these materials.

Use of this document is wholly voluntary. The existence of this document does not imply that there are no other ways to produce, test, measure, purchase, market, or provide other goods and services related to its scope.

**About the IEEE-ISTO**

The IEEE-ISTO is a not-for-profit corporation offering industry groups an innovative and flexible operational forum and support services. The IEEE-ISTO provides a forum not only to develop standards, but also to facilitate activities that support the implementation and acceptance of standards in the marketplace. The organization is affiliated with the IEEE (<http://www.ieee.org/>) and the IEEE Standards Association ([http://standards.ieee.org/)](http://standards.ieee.org/%29).

For additional information regarding the IEEE-ISTO and its industry programs visit:

<http://www.ieee-isto.org>

**About the IEEE-ISTO PWG**

The Printer Working Group (or PWG) is a Program of the IEEE Industry Standards and Technology Organization (ISTO) with member organizations including printer manufacturers, print server developers, operating system providers, network operating systems providers, network connectivity vendors, and print management application developers. The group is chartered to make printers and the applications and operating systems supporting them work together better. All references to the PWG in this document implicitly mean “The Printer Working Group, a Program of the IEEE ISTO.” In order to meet this objective, the PWG will document the results of their work as open standards that define print related protocols, interfaces, procedures and conventions. Printer manufacturers and vendors of printer related software will benefit from the interoperability provided by voluntary conformance to these standards.

In general, a PWG standard is a specification that is stable, well understood, and is technically competent, has multiple, independent and interoperable implementations with substantial operational experience, and enjoys significant public support.

For additional information regarding the Printer Working Group visit:

http://www.pwg.org

Contact information:

The Printer Working Group

c/o The IEEE Industry Standards and Technology Organization

445 Hoes Lane

Piscataway, NJ 08854

USA

 Table of Contents

1. 1. Introduction 6

1.1 Scope 6

1.2 Localization 7

1. 2. Terminology 8

2.1 Conformance Terminology 8

2.2 Other Terminology 8

2.3 Acronyms and Organizations 9

1. 3. Media Type Names 10

3.1 Standard Media Type Names 10

3.2 Vendor Media Type Names 15

3.3 Custom Media Type Names 15

3.4 Derived Media Type Names 15

1. 4. Color Names 16

4.1 Vendor Color Names 18

4.2 Custom Color Names 18

1. 5. Media Size Self-Describing Names 19

5.1 Media Size Self-Describing Name Format 19

5.1.1 class-in, class-mm, "choice", and "disc" 20

5.1.2 size-name 20

5.1.3 short-dim and long-dim 20

5.1.4 inner-dim and outer-dim 21

5.1.5 Conversion 21

5.1.6 Examples 21

5.1.7 Custom and Roll-Fed Media Size Self-Describing Names 21

5.1.8 Reserved Size Names 21

5.1.9 Conventions for the Tables 22

1. 6. Media Coating Names 29

6.1 Vendor Media Coating Names 29

6.2 Custom Media Coating Names 29

1. 7. Media Source Names 30

7.1 Vendor Media Source Names 31

7.2 Custom Media Source Names 31

1. 8. Media Tooth Names 32

8.1 Vendor Media Tooth Names 32

8.2 Custom Media Tooth Names 32

1. 9. Conformance Requirements 33
2. 10. Internationalization Considerations 33
3. 11. Security Considerations 33
4. 12. IANA Considerations 34

12.1 Attribute Value Registrations 34

1. 13. Collected ABNF 40
2. 14. Parser Considerations for the Media Size Name (Informative) 42

14.1 Client Parsers 42

14.2 Device Parsers 42

1. 15. References 43

15.1 Normative References 43

15.2 Informational References 44

1. 16. Authors' Addresses 44

List of Tables

Table 1 - Media Type Names 10

Table 2 - Color Names 16

Table 3 - North American Sheet Media Sizes 22

Table 4 - ISO Sheet Media Sizes 24

Table 5 - Other Metric Sheet Media Sizes 26

Table 6 - Japanese Sheet Media Sizes 27

Table 7 - Chinese Sheet Media Sizes 28

Table 9 - Media Source Names 30

Table 10 - Media Tooth Names 32

1. Introduction

Media names/properties for coatings, colors, sizes, sources, tooth, and types have been defined in many previously published standards related to printing. Examples are the ISO Document Printing Application [ISO10175], the IEEE Transport Independent Printer/System Interface [IEEE1284.1], the Printer MIB v2 [RFC3805], and the Internet Printing Protocol/1.1: Model and Semantics [RFC2911]. Although there is a high degree of commonality in the set of media names/properties presented in these documents, they do not represent a uniform set. This document defines a complete set of coatings, colors, sizes, sources, tooth, and types that can be used as a normative reference by other standards. These definitions are also registered in the IANA registry for IPP [IANA-IPP].

The previous version of this specification, PWG 5101.1-2002, focused on collecting existing media color, size, and type names and defining a self-describing media size name format. This specification extends this work to include new "common" names including media sources, custom, vendor, and derived name formats, and a proper IANA registration for use with IPP.

* 1. Scope

This document defines colorant names and media coatings, colors, sizes, tooth, and types. Other numeric media properties such as weight and opacity are not included.

The media size dimensions that are defined in this document are independent of the media feed direction (i.e. short edge feed or long edge feed) or printing orientation (i.e. portrait or landscape). Both of these parameters are best handled by unique properties rather than overloading the media size, e.g., in IPP a "media" attribute with value 'na\_letter\_8.5x11in' and "orientation-requested" attribute with value 4 (landscape).

Dimensions are provided in inches or millimeters to avoid conversion errors. Programs that convert media dimensions to/from other units have a responsibility to ensure that errors do not accumulate. For example, when converting from inches to hundredths of millimeters, programs will truncate any fractional remainder, but when converting from hundredths of millimeters to inches those same programs will round any remainder to the nearest thousandth of an inch.

Media sizes typically represent cut sheets. Sizes can also represent the minimum and maximum supported sheet dimensions, the inner and outer diameters of printable discs (e.g. CD, DVD, etc.), the minimum and maximum supported roll dimensions, and specific roll-fed media dimensions. No accommodation is made to support continuous printing applications, although a client application can supply multiple "pages" of content with each page representing a strip of content on a continuous printout.

The color property that is included in a portion of the Media Name entries in both the Printer MIB and IPP are included as a separate independent set of Color Names in this specification. The Color Names are defined to be used to describe marker colorants and media color. The sRGB reference values for each named color are not normative but rather are provided for purposes of display on a client, much as the Localized Name (see section 1.2 below) can be used on the client.

* 1. Localization

The intent of the names defined in this specification is for machine communication. Examples include:

1. From a printer to client software,
2. From client software to a printer, and
3. From a printer data description file to client software.

This specification defines example localizations for each name in the "Localized Name" column of each table. Typically a client will localize these names to the language of the user before displaying them. However, when a client encounters a name that it does not recognize, the names have been structured so that they can be converted to title case form (e.g. "photographic-glossy" becomes "Photographic Glossy") and displayed to the user without further localization. Color names can also include sRGB reference values for display as well.

The Media Size Self-Describing Name deserves special mention. It contains both a media size name and the dimensions, in case the receiver does not recognize the media size name. Such a receiver can then parse the Media Size Self-Describing Name and discover the intended dimensions of such an unrecognized media. These names have also been defined to facilitate parsing and/or fallback presentation of either the media size name and/or the dimensions parts. Programs are encouraged to display dimensional sizes using the original units to avoid confusion, however this behavior is outside the scope of this specification.

1. Terminology
	1. Conformance Terminology

Capitalized terms, such as MUST, MUST NOT, RECOMMENDED, REQUIRED, SHOULD, SHOULD NOT, MAY, and OPTIONAL, have special meaning relating to conformance as defined in Key words for use in RFCs to Indicate Requirement Levels [RFC2119].

* 1. Other Terminology

*ABNF**(Augmented Backus-Naur Form)*; [ABNF] A formal meta-syntax used to express content-free grammars. ABNF is commonly used in Internet protocol specifications and is defined in the Augmented BNF for Syntax Specifications [STD68].

*Alias***;** An alternative name that is commonly used to mean the same as a name standardized in this document, but which is not defined for a use that conforms to this specification.

*Color Name*; The standard name used to identify the color of media or marker colorant such as ‘white’, ‘red’, ‘ivory’, 'cyan', 'magenta', 'yellow', and 'black'.

*Legacy Name*; A standard name used in the same contexts as the names defined in this specification, but which is deprecated from use when conforming to this specification. This name is provided for historical context.

*Media*; The consumable upon which the marking engine marks so as to form a text and/or pictorial image, typically paper.

*Media Dimensions*; The short and long dimensions of the media or the inner and outer diameters of a printable disc.

*Media Finish***;** An adjective that describes the surface texture of the medium. In most cases the texture is obtained by the application of a coating. Examples: ‘glossy’, ‘matte’.

*Media Size Name***;** The standard name that identifies a particular media size. Examples: ‘iso\_a4’, ‘na\_letter’, ‘monarch’.

*Media Size Self-Describing Name (or Media Size for short)*; An ASCII string that contains a Media Size Name and the Media Dimensions that correspond to the Media Size Name. Examples: ‘iso\_a4**\_**210x297mm’, ‘na\_letter**\_**8.5x11in’, ‘na\_monarch**\_**3.875x7.5in’.

*Media Source Name;* The standard name that identifies a particular media source. Examples: 'tray-1', 'manual', 'large-capacity'.

*Media Type Name*; The standard name that identifies a particular media type, i.e., the predominate characteristic of the media. Examples: ‘stationery’, ‘transparency’, ‘envelope’.

* 1. Acronyms and Organizations

*ASCII*: American Standard Code for Information Interchange

*ASME*: American Society of Mechanical Engineers, http://www.asme.org/

*DPA*: Document Printing Application

*IANA*: Internet Assigned Numbers Authority, http://www.iana.org/

*IETF*: Internet Engineering Task Force, http://www.ietf.org/

*IPP*: Internet Printing Protocol

*ISO*: International Organization for Standardization, http://www.iso.org/

*JTAPI*: Job Ticket Application Programming Interface,
 http://wiki.linuxfoundation.org/en/OpenPrinting/JTAPI

*MIB*: Management Information Base

*PSTN*: Public Switched Telephone Network

*PWG*: Printer Working Group, http://www.pwg.org/

*RFC*: Request For Comments

*sRGB, sRGBA*: Standard Red Green Blue (Alpha) color space,
 http://www.w3.org/Graphics/Color/sRGB.html

1. Media Type Names

The following subsections define standard media type names and naming conventions.

* 1. Standard Media Type Names

The standard Media Type Names are defined in Table 1. The base set of these names is derived from the Printer MIB v2 [RFC3805], Media Features for Display, Print, and Fax [RFC2534], and IPP Production Printing Attributes - Set 1 [PWG5100.3]. Additional values MAY be registered with IANA according to section 6.1 of the Internet Printing Protocol/1.1: Model and Semantics [RFC2911].

Media Types that are produced using a coating or special process can only apply coating or process on one side. The Media Type Names defined in this specification do not distinguish between one sided and two sided conditions.

Standard Media Type Names conform to the following ABNF [STD68]:

standard-type-name = keyword

keyword = ALPHA 1\*( ALPHA / DIGIT / "-" / "\_" / ".")

Table 1 - Media Type Names

| **Name** | **Localized Name** | **Description** |
| --- | --- | --- |
| aluminum | Aluminum | An opaque aluminum media; deprecated - see "metal" |
| auto | Automatic | Automatically selected/detected media |
| back-print-film | Back Print Film | A translucent film that the user can view with or without backlighting |
| cardboard | Cardboard | A corrogated, opaque material |
| cardstock | Card Stock | A heavier or stiffer opaque material than "stationery" |
| cd | Compact Disc | A compact disc; deprecated - see "disc" |
| continuous | Continuous | Continuously connected sheets of an opaque material - which edge is connected is not specified [RFC2534]  |
| continuous-long | Continuous (Long) | Continuously connected sheets of an opaque material connected along the long edge [RFC3805] |
| continuous-short | Continuous (Short) | Continuously connected sheets of an opaque material connected along the short edge [RFC3805] |
| corrogated-board | Cardboard | A corrogated, opaque materal; deprecated - see "cardboard" |
| disc | Optical Disc | An optical disc |
| disc-glossy | Optical Disc (Glossy) | An optical disc with a glossy coating |
| disc-high-gloss | Optical Disc (High-Gloss) | An optical disc with a "high-gloss" coating |
| disc-matte | Optical Disc (Matte) | An optical disc with a matte coating |
| disc-satin | Optical Disc (Satin) | An optical disc with a satin finish coating |
| disc-semi-gloss | Optical Disc (Semi-Gloss) | An optical disc with a semi-gloss coating |
| double-wall | Cardboard (Double Wall) | A corrogated, opaque material with two layers or walls |
| dvd | Digital Versatile Disc | A printable DVD; deprecated - see "disc" |
| end-board | Cardboard (End) | A corrogated, opaque material that is closed on the ends |
| envelope | Envelope | Envelopes that can be used for conventional mailing purposes [RFC2534] [RFC3805] |
| envelope-archival | Envelope (Archival) | Envelopes made from an archival-quality material |
| envelope-bond | Envelope (Bond) | Envelopes made from a medium stock |
| envelope-coated | Envelope (Coated) | Envelopes made from a coated material |
| envelope-colored | Envelope (Colored) | Envelopes made from a colored material |
| envelope-cotton | Envelope (Cotton) | Envelopes made from a material composed in part of cotton or rag fibers |
| envelope-fine | Envelope (Fine) | Envelopes made from vellum or other high quality opaque material |
| envelope-heavyweight | Envelope (Heavyweight) | Envelopes made from a heavy stock |
| envelope-inkjet | Envelope (Inkjet) | Envelopes made from a material designed to minimize the spread of liquid inks. Can be accomplished using a coating |
| envelope-lightweight | Envelope (Lightweight) | Envelopes made from a light stock |
| envelope-plain | Envelope (Plain) | Envelopes that are not preprinted and have no windows [RFC2534] [RFC3805] |
| envelope-preprinted | Envelope (Preprinted) | Envelopes with a preprinted image |
| envelope-window | Envelope (Window) | Envelopes that have windows for addressing purposes [RFC3805] |
| fabric | Fabric | Printable fabric |
| fabric-archival | Fabric (Archival) | Printable fabric with archival qualities |
| fabric-glossy | Fabric (Glossy) | Printable fabric with a glossy coating or finish |
| fabric-high-gloss | Fabric (High-Gloss) | Printable fabric with a high-gloss coating or finish |
| fabric-matte | Fabric (Matte) | Printable fabric with a matte coating or finish |
| fabric-semi-gloss | Fabric (Semi-Gloss) | Printable fabric with a semi-gloss coating or finish |
| fabric-waterproof | Fabric (Waterproof) | Printable fabric that is waterproof |
| full-cut-tabs | Full Cut Tabs | Media with a tab that runs the full length of the sheet so that only one tab is visible extending out beyond the edge of non-tabbed media |
| glass | Glass | Sheets of rigid glass, typically transparent |
| glass-colored | Glass (Colored) | Sheets of colored rigid glass |
| glass-opaque | Glass (Opaque) | Sheets of opaque rigid glass |
| glass-surfaced | Glass (Surfaced) | Sheets of rigid glass with a semi-smooth (abraded) surface, typically translucent |
| glass-textured | Glass (Textured) | Sheets of rigid glass with a raised surface texture of lines, ridges, and or shapes |
| labels | Labels | Label stock, for example a sheet of peel-off labels |
| labels-colored | Labels (Colored) | Label stock with a colored (non-white) appearance |
| labels-glossy | Labels (Glossy) | Label stock with a glossy finish |
| labels-high-gloss | Labels (High-Gloss) | Label stock with a "high-gloss" finish |
| labels-inkjet | Labels (Inkjet) | Label stock designed to minimize the spread of liquid inks |
| labels-matte | Labels (Matte) | Label stock with a matte finish |
| labels-permanent | Labels (Permanent) | Label stock with a permanent adhesive |
| labels-satin | Labels (Satin) | Label stock with a satin finish |
| labels-security | Labels (Security) | Label stock with a semi-permanent adhesive with security features |
| labels-semi-gloss | Labels (Semi-Gloss) | Label stock with a semi-gloss finish |
| letterhead | Stationery (Letterhead) | Letterhead; deprecated - see "stationery-letterhead" |
| metal | Metal | A metallic medium |
| metal-glossy | Metal (Glossy) | A metallic medium with a glossy finish |
| metal-high-gloss | Metal (High-Gloss) | A metallic medium with a "high-gloss" finish |
| metal-matte | Metal (Matte) | A metallic medium with a matte finish |
| metal-satin | Metal (Satin) | A metallic medium with a satin finish |
| metal-semi-gloss | Metal (Semi-Gloss) | A metallic medium with a semi-gloss finish |
| multi-layer | Multi-Layer | Form medium composed of multiple layers which are pre-attached to one another; e.g., for use with impact printers [RFC3805] |
| multi-part-form | Multi-Part Form | Form medium composed of multiple layers not pre-attached to one another; each sheet can be drawn separately from an input source [RFC3805] |
| other | Other | Other media that does not fall into any of the specific type names; deprecated |
| paper | Stationery | Separately cut sheets of an opaque material; deprecated, see "stationery" |
| photographic | Photo | An opaque material to produce photographic quality images. The coating is unspecified |
| photographic-archival | Photo (Archival) | An archival-quality material used to reproduce photographic quality images. |
| photographic-film | Photo (Film) | Film used to produce photographic quality images |
| photographic-glossy | Photo (Glossy) | An opaque material that has a "glossy" coating to produce photographic quality images [PWG5100.3] |
| photographic-high-gloss | Photo (High-Gloss) | An opaque material that has a "high-gloss" coating to produce photographic quality images [PWG5100.3] |
| photographic-matte | Photo (Matte) | An opaque material that has a "matte" coating to produce photographic quality images [PWG5100.3] |
| photographic-satin | Photo (Satin) | An opaque material that has a "satin" coating to produce photographic quality images [PWG5100.3] |
| photographic-semi-gloss | Photo (Semi-Gloss) | An opaque material that has a "semi-gloss" coating to produce photographic quality images [PWG5100.3] |
| plastic | Plastic | An opaque printable plastic (polypropylene or similar) |
| plastic-archival | Plastic (Archival) | An opaque, archival-quality printable plastic |
| plastic-colored | Plastic (Colored) | An opaque, colored printable plastic |
| plastic-glossy | Plastic (Glossy) | An opaque printable plastic with a glossy coating or finish |
| plastic-high-gloss | Plastic (High Gloss) | An opaque printable plastic with a high gloss coating or finish |
| plastic-matte | Plastic (Matte) | An opaque printable plastic with a matte coating or finish |
| plastic-satin | Plastic (Satin) | An opaque printable plastic with a satin coating or finish |
| plastic-semi-gloss | Plastic (Semi-Gloss) | An opaque printable plastic with a semi-gloss coating or finish |
| pre-cut-tabs | Pre-Cut Tabs | Media with tabs that are cut so that more than one tab is visible extending out beyond the edge of non-tabbed media in an Output-Document. |
| roll | Roll | Media provided on a roll; deprecated - see any other media type name that correctly describes the type of media |
| screen | Screen | A refreshable display [RFC2534] |
| screen-paged | Screen (Paged) | A refreshable display which cannot scroll [RFC2534] |
| self-adhesive | Self-Adhesive Paper | Self-adhesive paper as sheets or rolls; see "labels" for pre-cut labels |
| self-adhesive-film | Self-Adhesive Film | Self-adhesive film as sheets or rolls |
| single-face | Single Face | Corrogated cardboard with a single face |
| single-wall | Cardboard (Single Wall) | Corrogated cardboard with a single layer or wall |
| sleeve | Sleeve | An opaque media used for a sleeve |
| stationery | Paper (Plain) | General-purpose opaque material [RFC2534] [RFC3805] |
| stationery-archival | Paper (Archival) | An archival-quality material used for long-lived documents |
| stationery-bond | Paper (Bond) | A medium stock opaque material |
| stationery-coated | Paper (Coated) | An opaque material with a coating of unspecified type |
| stationery-colored | Paper (Colored) | A colored (non-white) opaque material |
| stationery-cotton | Paper (Cotton) | An opaque material composed in part of cotton or rag fibers |
| stationery-fine | Paper (Vellum) | Vellum or other high quality opaque material |
| stationery-heavyweight | Paper (Heavyweight) | A heavy stock opaque material |
| stationery-heavyweight-coated | Paper (Heavyweight Coated) | A heavy stock opaque material with a coating of unspecified type |
| stationery-inkjet | Paper (Inkjet) | An opaque material designed to minimize the spread of liquid inks. Can be accomplished using a coating |
| stationery-letterhead | Paper (Letterhead) | An opaque material with a preprinted letterhead [PWG5100.3] |
| stationery-lightweight | Paper (Lightweight) | A light stock opaque material |
| stationery-preprinted | Paper (Preprinted) | An opaque material with a preprinted image [PWG5100.3] |
| stationery-prepunched | Paper (Prepunched) | An opaque material that is punched with an unspecified hole pattern |
| tab-stock | Tab Stock | Media with tabs (either pre-cut or full-cut) [RFC3805] |
| tractor | Tractor Feed | Tractor feed media |
| transfer | Transfer | Transfer paper, such as for T-shirt printing |
| transparency | Transparency | A transparent material [RFC2534] [RFC3805] |
| triple-wall | Cardboard (Triple Wall) | Cardboard with three layers or walls |

* 1. Vendor Media Type Names

Vendor Media Type Names MAY be added without an update to this specification by prefixing the names with a reverse-DNS identifier, e.g. "org.pwg-my-type". The format is defined by the following ABNF [STD68]:

vendor-type-name = 1\*ALPHA 1\*dns-name "-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

dns-name = "." 1\*( ALPHA / DIGIT / "-" )

* 1. Custom Media Type Names

Media Type Names MAY be locally extended using a Custom Media Type Name without an update to this specification by prefixing the names with the string "custom-", e.g. "custom-xyz-letterhead". The format is defined by the following ABNF [STD68]:

custom-type-name = "custom-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

* 1. Derived Media Type Names

Media Type Names MAY be locally extended from existing standard, vendor, or custom media names by prefixing the names with the string "derived-" and appending the existing name with a leading underscore, e.g. "derived-xyz-photo\_photographic-glossy". The format is defined by the following ABNF [STD68]:

derived-type-name = "derived-" base-name "\_"

 ( base-name / vendor-type-name /

 custom-type-name )

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / ".")

1. Color Names

Table 2 defines the Media Color Names. These names are derived primarily from the Printer MIB v2 [RFC3805] prtInputMediaColor and JTAPI [JTAPI] standard values. The name 'transparent' has been replaced by 'no-color' to allow the use of a color attribute with the media type ‘transparency’ as defined in Table 2.

Table 2 - Color Names

| **Name** | **Localized Name** | **sRGBA Value** | **Sample** |
| --- | --- | --- | --- |
| no-color | Transparent | 0xFFFFFF00 |  |
| black | Black | 0x000000FF |  |
| clear-black | Clear Black | 0x0000007F |  |
| light-black | Light Black | 0x808080FF |  |
| blue | Blue | 0x0000FFFF |  |
| clear-blue | Clear Blue | 0x0000FF7F |  |
| dark-blue | Dark Blue | 0x00008BFF |  |
| light-blue | Light Blue | 0xADD8E6FF |  |
| brown | Brown | 0xA52A2AFF |  |
| clear-brown | Clear Brown | 0xA52A2A7F |  |
| dark-brown | Dark Brown | 0x5C4033FF |  |
| light-brown | Light Brown | 0x9966FFFF |  |
| buff | Buff | 0xF0DC82FF |  |
| clear-buff | Clear Buff | 0xF0DC827F |  |
| dark-buff | Dark Buff | 0x976638FF |  |
| light-buff | Light Buff | 0xECD9B0FF |  |
| cyan | Cyan | 0x00FFFFFF |  |
| clear-cyan | Clear Cyan | 0x00FFFF7F |  |
| dark-cyan | Dark Cyan | 0x008B8BFF |  |
| light-cyan | Light Cyan | 0xE0FFFFFF |  |
| gold | Gold | 0xFFD700FF |  |
| clear-gold | Clear Gold | 0xFFD7007F |  |
| dark-gold | Dark Gold | 0xEEBC1DFF |  |
| light-gold | Light Gold | 0xF1E5ACFF |  |
| goldenrod | Goldenrod | 0xDAA520FF |  |
| clear-goldenrod | Clear Goldenrod | 0xDAA5207F |  |
| dark-goldenrod | Dark Goldenrod | 0xB8860BFF |  |
| light-goldenrod | Light Goldenrod | 0xFFEC8BFF |  |
| gray | Gray | 0x808080FF |  |
| clear-gray | Clear Gray | 0x8080807F |  |
| dark-gray | Dark Gray | 0x404040FF |  |
| light-gray | Light Gray | 0xD3D3D3FF |  |
| green | Green | 0x008000FF |  |
| clear-green | Clear Green | 0x0080007F |  |
| dark-green | Dark Green | 0x006400FF |  |
| light-green | Light Green | 0x90EE90FF |  |
| ivory | Ivory | 0xFFFFF0FF |  |
| clear-ivory | Clear Ivory | 0xFFFFF07F |  |
| dark-ivory | Dark Ivory | 0xF2E58FFF |  |
| light-ivory | Light Ivory | 0xFFF8C9FF |  |
| magenta | Magenta | 0xFF00FFFF |  |
| clear-magenta | Clear Magenta | 0xFF00FF7F |  |
| dark-magenta | Dark Magenta | 0x8B008BFF |  |
| light-magenta | Light Magenta | 0xFF77FFFF |  |
| multi-color | Multi-Color | Undefined |  |
| clear-multi-color | Clear Multi-Color | Undefined |  |
| mustard | Mustard | 0xFFDB58FF |  |
| clear-mustard | Clear Mustard | 0xFFDB587F |  |
| dark-mustard | Dark Mustard | 0x7C7C40FF |  |
| light-mustard | Light Mustard | 0xEEDD62FF |  |
| orange | Orange | 0xFFA500FF |  |
| clear-orange | Clear Orange | 0xFFA5007F |  |
| dark-orange | Dark Orange | 0xFF8C00FF |  |
| light-orange | Light Orange | 0xD9A465FF |  |
| pink | Pink | 0xFFC0CBFF |  |
| clear-pink | Clear Pink | 0xFFC0CB7F |  |
| dark-pink | Dark Pink | 0xE75480FF |  |
| light-pink | Light Pink | 0xFFB6C1FF |  |
| red | Red | 0xFF0000FF |  |
| clear-red | Clear Red | 0xFF00007F |  |
| dark-red | Dark Red | 0x8B0000FF |  |
| light-red | Light Red | 0xFF3333FF |  |
| silver | Silver | 0xC0C0C0FF |  |
| clear-silver | Clear Silver | 0xC0C0C07F |  |
| dark-silver | Dark Silver | 0xAFAFAFFF |  |
| light-silver | Light Silver | 0xE1E1E1FF |  |
| turquoise | Turquoise | 0x30D5C8FF |  |
| clear-turquoise | Clear Turquoise | 0x30D5C87F |  |
| dark-turquoise | Dark Turquoise | 0x00CED1FF |  |
| light-turquoise | Light Turquoise | 0xAFE4DEFF |  |
| violet | Violet | 0xEE82EEFF |  |
| clear-violet | Clear Violet | 0xEE82EE7F |  |
| dark-violet | Dark Violet | 0x9400D3FF |  |
| light-violet | Light Violet | 0x7A5299FF |  |
| white | White | 0xFFFFFFFF |  |
| clear-white | Clear White | 0xFFFFFF7F |  |
| yellow | Yellow | 0xFFFF00FF |  |
| clear-yellow | Clear Yellow | 0xFFFF007F |  |
| dark-yellow | Dark Yellow | 0xFFCC00FF |  |
| light-yellow | Light Yellow | 0xFFFFE0FF |  |

* 1. Vendor Color Names

Vendor Color Names MAY be added without an update to this specification by prefixing the names with a reverse-DNS identifier and optionally adding one or more sRGBA colors on the end, e.g. "org.pwg-my-color\_ff0000ff". The format is defined by the following ABNF [STD68]:

vendor-color-name = 1\*ALPHA 1\*dns-name "-" base-name

 \*( "\_" red-color green-color blue-color

 [ alpha-color ] )

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

dns-name = "." 1\*( ALPHA / DIGIT / "-" )

red-color = 2HEXDIG

green-color = 2HEXDIG

blue-color = 2HEXDIG

alpha-color = 2HEXDIG

* 1. Custom Color Names

Media Color Names MAY be locally extended using a Custom Media Color Name without an update to this specification by prefixing the color name with the string "custom-" and optionally adding one or more sRGBA colors to the end, e.g. "custom-mauve\_b996ae". The format is defined by the following ABNF:

custom-color-name = "custom-" base-name

 \*( "\_" red-color green-color blue-color

 [ alpha-color ] )

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

red-color = 2HEXDIG

green-color = 2HEXDIG

blue-color = 2HEXDIG

alpha-color = 2HEXDIG

1. Media Size Self-Describing Names

The media size specifications defined in this document, labeled as Media Size Self-Describing Names, are cross indexed to Legacy Names and Alias (common) names. The Legacy Names define the names currently used in the ISO DPA, Printer MIB, or IPP documents.

* 1. Media Size Self-Describing Name Format

This specification defines a Media Size Self-Describing Name format that is recommended to be used by all new implementations. Names conforming to this format do not contain any space characters (0x20) - only letters, numbers, period ("."), hyphen ("-"), and underscore ("\_") are allowed.

Wherever possible, the Media Size Self-Describing Name has been derived from the Legacy Name. In many cases the 'class\_size-name' portion is identical to the Legacy Name. In the remaining cases, the 'class' portion MUST be ignored to match the Legacy Name.

This format has the Media Size Name and the Media Dimensions embedded within the string and allows a device to operate without a Media Size Name to Media Dimensions localization table. A long-dim value of 0 is used for reporting the width of roll-fed media (section 5.1.3). The Media Size Self-Describing Name format is structured using the following ABNF [STD68]:

media-size-self-describing-name =

 media-size-name / "choice" 2\*( "\_" media-size-name )

media-size-name = class-in "\_" base-name "\_" short-dim "x" long-dim "in" /

 class-mm "\_" base-name "\_" short-dim "x" long-dim "mm" /

 "disc\_" size-name "\_" inner-dim "x" outer-dim "mm"

class-in = "custom" / "na" / "asme" / "roc" / "oe" / "roll"

class-mm = "custom" / "iso" / "jis" / "jpn" / "prc" / "om" / "roll"

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

short-dim = dim

long-dim = dim / "0"

inner-dim = dim

outer-dim = dim

dim = integer-part [fraction-part] / "0" fraction-part

integer-part = non-zero-digit \*digit

fraction-part = "." \*digit non-zero-digit

non-zero-digit = %x31-39

The above ABNF is current as of the date of publication this document. Implementers should be aware that the currently defined class names will be expanded in the future to cover new groups of media sizes. Thus conforming client parser implementations that are developed using this ABNF MUST accept class names that are not currently represented in this list. The online PWG Media Names ABNF [MSN-ABNF] is the proper reference for use within this specification.

* + 1. class-in, class-mm, "choice", and "disc"

This string part is present to indicate the name space or jurisdiction for the size name in order to prevent name clashes. Currently defined classes are:

'asme'; American Society of Mechanical Engineers sizes in inches,

'choice'; Lists two or more self-describing media names that can be used in alphabetical order,

'custom'; Site-unique and user-defined sizes in inches or millimeters as defined in section,

'disc'; Printable optical disc media, sizes are inner and outer printable diameters in millimeters,

'iso'; International Standards Organization sizes in millimeters,

'jis'; Japanese Information Standard sizes in millimeters,

'jpn'; Japan sizes in millimeters,

'na'; North America sizes in inches,

'oe'; Other vendor-defined (English) sizes in inches,

'om'; Other vendor-defined (metric) sizes in millimeters,

'prc'; People's Republic of China sizes in millimeters,

'roc'; Republic of China (Taiwan) sizes in inches, and

'roll'; Roll media sizes in inches or millimeters.

New class names MUST conform to the following ABNF:

class-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "." )

* + 1. size-name

This string provides a textual description of the media size. It is normally derived from the Legacy or Alias name associated with the media size. The size-name can consist of multiple parts, with each part separated by a hyphen (0x2D).

* + 1. short-dim and long-dim

These values define the media size. The short-dim is always the smaller of the two dimensions for sheet-fed media. The dimensions are presented in decimal format to as many places as necessary to define the size. Trailing zeros MUST NOT be used if a decimal portion is present. Leading zeros MUST NOT ever be used. When expressing a supported or ready media width for roll-fed media where the minimum and maximum lengths are unbounded or unknown, the long-dimMUST BE 0.

Examples:

123 (valid)

123.456 (valid)

123. (invalid, trailing decimal with no digits)

123.4560 (invalid, trailing zero)

0123.456 (invalid, leading zero)

* + 1. inner-dim and outer-dim

These values define the inner and outer diameters of the printable area on an optical disc. The dimensions are presented in decimal format to as many places as necessary to define the size. Trailing zeros MUST NOT be used if a decimal portion is present. See section 5.1.3 for examples.

* + 1. Conversion

For interchange between programs, the dimensions presented in this specification MUST NOT be converted to another system of units but MUST remain as defined in this specification.

The common usage of some names can represent several physical sizes, e.g., folio, quarto, foolscap, and executive. To avoid naming and sizing conflicts, a hyphenated identifier MUST be used to link the names to a specific size.

* + 1. Examples

The letter size (8.5 inches by 11 inches) used primarily in North America:

na\_letter\_8.5x11in

The ISO A4 size (210 mm by 297 mm) used world-wide:

iso\_a4\_210x297mm

* + 1. Custom and Roll-Fed Media Size Self-Describing Names

The classes "custom" and "roll" allow extensibility of the media size set without an update to this specification. These classes are primarily intended for special or user-defined media sizes that are used at a minimum number of locations. Size names that use the "custom" or "roll" prefix MUST NOT be registered with IANA.

* + 1. Reserved Size Names

The following sizenames are reserved**:**

'current'; indicates the currently loaded media,

'current.*source-name*'; indicated the currently loaded media for the given media source,

'max'; Indicates the upper size limit of either a device or application,

'max.*source-name*'; indicates the upper size limit for the given media source,

'min'; indicates a lower size limit, and

'min.*source-name*'; indicates the lower size limit for the specified media source.

For example, a device that can process forms from 2 x 3 inches to 18 x 36 inches would report:

custom\_max\_18x36in

custom\_min\_2x3in

A device with two roll sources, "roll-1" and "roll-2", that accept rolls up to 60 inches in width and 1800 inches (150 feet) in length with a 36 inch roll installed with 240 inches (20 feet) remaining would report:

roll\_current.roll-1\_36x240in

roll\_max\_60x1800in

roll\_min\_2x3in

* + 1. Conventions for the Tables

The rest of this section contains the tables of Media Size Self-Describing Names. Within a table entries from different sources are grouped together. The entries in these groups are arranged in order of increasing size of the smaller dimension. Engineering sizes are defined in Decimal Inch Drawing Sheet Size and Format [ASME-IN] and Metric Drawing Sheet Size and Format [ASME-M].

The presence of “(envelope)” in the Alias column indicates this size is also commonly used for envelopes. It does not imply that this size is only available as an envelope media type.

Table - North American Sheet Media Sizes

| **Legacy Name** | **Alias (common name)** | **Self-Describing Name (inches)** | **Localized Name** |
| --- | --- | --- | --- |
|  | index-3x5 | na\_index-3x5\_3x5in | 3 x 5" |
|  | personal (envelope) | na\_personal\_3.625x6.5in | Personal Envelope |
| monarch-envelope |  | na\_monarch\_3.875x7.5in | Monarch Envelope |
| na-number-9-envelope |  | na\_number-9\_3.875x8.875in | #9 Envelope |
|  | index-4x6 (postcard) | na\_index-4x6\_4x6in | 4 x 6" |
| na-number-10-envelope | comm-10 (envelope) | na\_number-10\_4.125x9.5in | #10 Envelope |
|  | a2 (envelope) | na\_a2\_4.375x5.75in | A2 Envelope |
|  | number-11 (envelope) | na\_number-11\_4.5x10.375in | #11 Envelope |
|  | number-12 (envelope) | na\_number-12\_4.75x11in | #12 Envelope |
|  | 5x7 | na\_5x7\_5x7in | 5 x 7" |
|  | index-5x8 | na\_index-5x8\_5x8in | 5 x 8" |
|  | number-14 (envelope) | na\_number-14\_5x11.5in | #14 Envelope |
| invoice | statement, mini, half-letter | na\_invoice\_5.5x8.5in | Statement |
|  | index-4x6-ext | na\_index-4x6-ext\_6x8in | 6 x 8" |
| na-6x9-envelope | 6x9 (envelope) | na\_6x9\_6x9in | 6 x 9" |
|  | c5 (envelope) | na\_c5\_6.5x9.5in | C5 Envelope |
| na-7x9-envelope | 7x9 (envelope) | na\_7x9\_7x9in | 7 x 9" |
| executive |  | na\_executive\_7.25x10.5in | US Executive |
| na-8x10 | government-letter | na\_govt-letter\_8x10in | 8 x 10" |
|  | government-legal | na\_govt-legal\_8x13in | 8 x 13" |
| quarto |  | na\_quarto\_8.5x10.83in | Quarto |
| na-letter | letter, a, engineering-a | na\_letter\_8.5x11in | US Letter |
|  | fanfold-european | na\_fanfold-eur\_8.5x12in | European Fanfold |
|  | letter-plus | na\_letter-plus\_8.5x12.69in | US Letter (Plus) |
|  | foolscap, german-legal-fanfold | na\_foolscap\_8.5x13in | Foolscap |
|  | oficio | na\_oficio\_8.5x13.4in | Oficio (Mexico) |
| na-legal | legal | na\_legal\_8.5x14in | US Legal |
|  | super-a | na\_super-a\_8.94x14in | 8.94 x 14" |
| na-9x11-envelope | 9x11 (envelope), letter-tab  | na\_9x11\_9x11in | 9 x 11" |
| arch-a | architecture-a (envelope) | na\_arch-a\_9x12in | 9 x 12" |
|  | letter-extra | na\_letter-extra\_9.5x12in | US Letter (Extra) |
|  | legal-extra | na\_legal-extra\_9.5x15in | US Legal (Extra) |
|  | 10x11 | na\_10x11\_10x11in | 10 x 11" |
| na-10x13-envelope | 10x13 (envelope) | na\_10x13\_10x13in | 10 x 13" Envelope |
| na-10x14-envelope | 10x14 (envelope) | na\_10x14\_10x14in | 10 x 14" Envelope |
| na-10x15-envelope | 10x15 (envelope) | na\_10x15\_10x15in | 10 x 15" Envelope |
|  | 11x12 | na\_11x12\_11x12in | 11 x 12" |
|  | edp | na\_edp\_11x14in | 11 x 14" |
|  | fanfold-us | na\_fanfold-us**\_**11x14.875in | US Fanfold |
|  | 11x15 | na\_11x15**\_**11x15in | 11 x 15" |
| tabloid | ledger, b, engineering-b | na\_ledger**\_**11x17in | 11 x 17" |
|  | european-edp | na\_eur-edp**\_**12x14in | 12 x 14" |
| arch-b | architecture-b, tabloid-extra | na\_arch-b**\_**12x18in | 12 x 18" |
|  | 12x19 | na\_12x19\_12x19in | 12 x 19" |
|  | b-plus | na\_b-plus**\_**12x19.17in | 12 x 19 1/6" |
|  | super-b | na\_super-b**\_**13x19in | 13 x 19" |
| c | engineering-c | na\_c**\_**17x22in | 17 x 22" |
| arch-c | architecture-c | na\_arch-c**\_**18x24in | 18 x 24" |
| d | engineering-d | na\_d**\_**22x34in | 22 x 34" |
| arch-d | architecture-d | na\_arch-d**\_**24x36in | 24 x 36" |
| f | e1 | asme\_f**\_**28x40in | 28 x 40" |
|  | wide-format | na\_wide-format**\_**30x42in | 30 x 42" |
| e | engineering-e | na\_e**\_**34x44in | 34 x 44" |
| arch-e | architecture-e | na\_arch-e**\_**36x48in | 36 x 48" |
|  | f, engineering-f | na\_f**\_**44x68in | 44 x 68" |

Table - ISO Sheet Media Sizes

| **Legacy Name**  | **Alias (common name)** | **Self-Describing Name (mm)** | **Localized Name** |
| --- | --- | --- | --- |
| iso-a10 | a10 | iso\_a10\_26x37mm | A10 |
| iso-a9 | a9 | iso\_a9\_37x52mm | A9 |
| iso-a8 | a8 | iso\_a8\_52x74mm | A8 |
| iso-a7 | a7 | iso\_a7\_74x105mm | A7 |
| iso-a6 | a6 | iso\_a6\_105x148mm | A6 |
| iso-a5 | a5 | iso\_a5\_148x210mm | A5 |
|  | a5-extra | iso\_a5-extra\_174x235mm | A5 (Extra) |
| iso-a4 | a4 | iso\_a4\_210x297mm | A4 |
|  | a4-tab | iso\_a4-tab\_225x297mm | A4 (Tab) |
|  | a4-extra | iso\_a4-extra\_235.5x322.3mm | A4 (Extra) |
| iso-a3 | a3 | iso\_a3\_297x420mm | A3 |
| iso-a4x3, a4x3 |  | iso\_a4x3\_297x630mm | A4x3 |
| iso-a4x4, a4x4 |  | iso\_a4x4\_297x841mm | A4x4 |
| iso-a4x5, a4x5 |  | iso\_a4x5\_297x1051mm | A4x5 |
| iso-a4x6, a4x6 |  | iso\_a4x6\_297x1261mm | A4x6 |
| iso-a4x7, a4x7 |  | iso\_a4x7\_297x1471mm | A4x7 |
| iso-a4x8, a4x8 |  | iso\_a4x8\_297x1682mm | A4x8 |
| iso-a4x9, a4x9 |  | iso\_a4x9\_297x1892mm | A4x9 |
| iso-a3-extra |  | iso\_a3-extra\_322x445mm | A3 (Extra) |
| iso-a2 | a2 | iso\_a2\_420x594mm | A2 |
| iso-a3x3, a3x3 |  | iso\_a3x3\_420x891mm | A3x3 |
| iso-a3x4, a3x4 |  | iso\_a3x4\_420x1189mm | A3x4 |
| iso-a3x5, a3x5 |  | iso\_a3x5\_420x1486mm | A3x5 |
| iso-a3x6, a3x6 |  | iso\_a3x6\_420x1783mm | A3x6 |
| iso-a3x7, a3x7 |  | iso\_a3x7\_420x2080mm | A3x7 |
| iso-a1 | a1 | iso\_a1\_594x841mm | A1 |
| iso-a2x3, a2x3 |  | iso\_a2x3\_594x1261mm | A2x3 |
| iso-a2x4, a2x4 |  | iso\_a2x4\_594x1682mm | A2x4 |
| iso-a2x5, a2x5 |  | iso\_a2x5\_594x2102mm | A2x5 |
| iso-a0 | a0 | iso\_a0\_841x1189mm | A0 |
| iso-a1x3, a1x3 |  | iso\_a1x3\_841x1783mm | A1x3 |
| iso-a1x4, a1x4 |  | iso\_a1x4\_841x2378mm | A1x4 |
| a0x2 | 2a0 | iso\_2a0\_1189x1682mm | A0x2 |
| a0x3 |  | iso\_a0x3\_1189x2523mm | A0x3 |
| iso-b10 | b10 | iso\_b10\_31x44mm | B10 |
| iso-b9 | b9 | iso\_b9\_44x62mm | B9 |
| iso-b8  | b8 | iso\_b8\_62x88mm | B8 |
| iso-b7 | b7 | iso\_b7\_88x125mm | B7 |
| iso-b6 | b6 (envelope) | iso\_b6\_125x176mm | B6 Envelope |
|  | b6/c4 (envelope) | iso\_b6c4\_125x324mm | B6/C4 Envelope |
| iso-b5 | b5 (envelope) | iso\_b5\_176x250mm | B5 Envelope |
|  | b5-extra | iso\_b5-extra\_201x276mm | B5 (Extra) |
| iso-b4 | b4 (envelope) | iso\_b4\_250x353mm | B4 Envelope |
| iso-b3 | b3 | iso\_b3\_353x500mm | B3 |
| iso-b2  | b2 | iso\_b2\_500x707mm | B2 |
| iso-b1 | b1 | iso\_b1\_707x1000mm | B1 |
| iso-b0 | b0 | iso\_b0\_1000x1414mm | B0 |
|  | c10 (envelope) | iso\_c10\_28x40mm | C10 Envelope |
|  | c9 (envelope) | iso\_c9\_40x57mm | C9 Envelope |
| iso-c8 | c8 (envelope) | iso\_c8\_57x81mm | C8 Envelope |
| iso-c7 | c7 (envelope) | iso\_c7\_81x114mm | C7 Envelope |
|  | c7/c6 (envelope) | iso\_c7c6\_81x162mm | C7/C6 Envelope |
| iso-c6 | c6 (envelope) | iso\_c6\_114x162mm | C6 Envelope |
|  | c6/c5 (envelope) | iso\_c6c5**\_**114x229mm | C6/C5 Envelope |
| iso-c5 | c5 (envelope) | iso\_c5**\_**162x229mm | C5 Envelope |
| iso-c4  | c4 (envelope) | iso\_c4**\_**229x324mm | C4 Envelope |
| iso-c3 | c3 (envelope) | iso\_c3**\_**324x458mm | C3 Envelope |
| iso-c2  | c2 (envelope) | iso\_c2**\_**458x648mm | C2 Envelope |
| iso-c1  | c1 (envelope) | iso\_c1**\_**648x917mm | C1 Envelope |
| iso-c0 | c0 (envelope) | iso\_c0**\_**917x1297mm | C0 Envelope |
| iso-designated | designated-long, dl (envelope) | iso\_dl**\_**110x220mm | DL Envelope |
| iso-ra4 |  | iso\_ra4\_215x305mm | RA4 |
| iso-sra4 |  | iso\_sra4\_225x320mm | SRA4 |
| iso-ra3 |  | iso\_ra3\_305x430mm | RA3 |
| iso-sra3 |  | iso\_sra3\_320x450mm | SRA3 |
| iso-ra2 |  | iso\_ra2**\_**430x610mm | RA2 |
| iso-sra2 |  | iso\_sra2**\_**450x640mm | SRA2 |
| iso-ra1 |  | iso\_ra1**\_**610x860mm | RA1 |
| iso-sra1 |  | iso\_sra1**\_**640x900mm | SRA1 |
| iso-ra0 |  | iso\_ra0**\_**860x1220mm | RA0 |
| iso-sra0 |  | iso\_sra0**\_**900x1280mm | SRA0 |

Table - Other Metric Sheet Media Sizes

|  |  |  |  |
| --- | --- | --- | --- |
| **Legacy Name**  | **Alias (common name)** | **Self-Describing Name (mm)** | **Localized Name** |
|  | small-photo | om\_small-photo\_100x150mm | 100 x 150mm |
|  |  | om\_wide-photo\_100x200mm | 100 x 200mm |
|  | Italian (envelope) | om\_italian\_110x230mm | Italian Envelope |
|  | Postfix (envelope) | om\_postfix\_114x229mm | Postfix Envelope |
|  | medium-photo | om\_medium-photo\_130x180mm | 120x180mm |
|  | large-photo | om\_large-photo\_200x300 | 200 x 300mm  |
| folio |  | om\_folio\_210x330mm | Folio |
|  | folio-sp | om\_folio-sp\_215x315mm | Folio (Special) |
|  | Invite (envelope) | om\_invite\_220x220mm | Invitation Envelope |

Table - Japanese Sheet Media Sizes

|  |  |  |  |
| --- | --- | --- | --- |
| **Legacy Name**  | **Alias (common name)** | **Self-Describing Name (mm)** | **Localized Name** |
| jis-b10 |  | jis\_b10\_32x45mm | JIS B10 |
| jis-b9 |  | jis\_b9\_45x64mm | JIS B9 |
| jis-b8 |  | jis\_b8\_64x91mm | JIS B8 |
| jis-b7 |  | jis\_b7\_91x128mm | JIS B7 |
| jis-b6 |  | jis\_b6\_128x182mm | JIS B6 |
| jis-b5 |  | jis\_b5\_182x257mm | JIS B5 |
| jis-b4 |  | jis\_b4\_257x364mm | JIS B4 |
| jis-b3 |  | jis\_b3\_364x515mm | JIS B3 |
| jis-b2  |  | jis\_b2\_515x728mm | JIS B2 |
| jis-b1 |  | jis\_b1\_728x1030mm | JIS B1 |
| jis-b0 |  | jis\_b0\_1030x1456mm | JIS B0 |
|  | exec | jis\_exec\_216x330mm | JIS Executive |
|  | kaku2 (envelope) | jpn\_kaku2\_240x332mm | Kakugata 2 Envelope |
|  |  | jpn\_kaku3\_216x277mm | Kakugata 3 Envelope |
|  |  | jpn\_kaku4\_197x267mm | Kakugata 4 Envelope |
|  |  | jpn\_kaku5\_190x240mm | Kakugata 5 Envelope |
|  |  | jpn\_kaku7\_142x205mm | Kakugata 7 Envelope |
|  |  | jpn\_kaku8\_119x197mm | Kakugata 8 Envelope |
|  | chou4 (envelope) | jpn\_chou4\_90x205mm | Chou 4 Envelope |
|  | hagaki (postcard) | jpn\_hagaki\_100x148mm | Hagaki |
|  | you4 (envelope) | jpn\_you4\_105x235mm | You 4 Envelope |
|  | you6 (envelope) | jpn\_you6\_98x190mm | You 6 Envelope |
|  | chou2 (envelope) | jpn\_chou2\_111.1x146mm | Chou 2 Envelope |
|  | chou3 (envelope) | jpn\_chou3\_120x235mm | Chou 3 Envelope |
|  |  | jpn\_chou40\_90x225mm | Chou 40 Envelope |
|  | oufuku (reply postcard) | jpn\_oufuku\_148x200mm | Oufuku Reply Postcard |
|  | kahu (envelope) | jpn\_kahu\_240x322.1mm | Kahu Envelope |

Table - Chinese Sheet Media Sizes

|  |  |  |  |
| --- | --- | --- | --- |
| **Legacy Name** | **Alias (common name)** | **Self-Describing Name (mm)** | **Localized Name** |
|  | prc-32k | prc\_32k\_97x151mm | Chinese 32k |
|  | prc1 (envelope) | prc\_1\_102x165mm | Chinese #1 Envelope |
|  | prc2 (envelope) | prc\_2\_102x176mm | Chinese #2 Envelope |
|  | prc4 (envelope) | prc\_4\_110x208mm | Chinese #4 Envelope |
|  | prc8 (envelope) | prc\_8\_120x309mm | Chinese #8 Envelope |
|  | prc6 (envelope) | prc\_6\_120x320mm | Chinese #6 Envelope |
|  | prc3 (envelope) | prc\_3\_125x176mm | Chinese #3 Envelope |
|  | prc-16k | prc\_16k\_146x215mm | Chinese 16k |
|  | prc7 (envelope) | prc\_7\_160x230mm | Chinese #7 Envelope |
|  | juuro-ku-kai | om\_juuro-ku-kai\_198x275mm | Chinese 4k (Large) |
|  | pa-kai | om\_pa-kai\_267x389mm | Chinese 16k (Large) |
|  | dai-pa-kai | om\_dai-pa-kai\_275x395mm | Chinese 8k (Large) |
|  | prc10 (envelope) | prc\_10\_324x458mm | Chinese #10 Envelope |
|  | roc-16k | roc\_16k\_7.75x10.75in | ROC 16k |
|  | roc-8k | roc\_8k\_10.75x15.5in | ROC 8k |

1. Media Coating Names

Standard "media-coating" names are defined in the IANA IPP Registry [IANA-IPP]. Localizations are provided in Table 8.

Table - Media Coating Names

|  |  |
| --- | --- |
| **Name** | **Localized Name** |
| glossy | Glossy |
| high-gloss | High Gloss |
| matte | Matte |
| none | None |
| satin | Satin |
| semi-gloss | Semi-Gloss |

* 1. Vendor Media Coating Names

Vendor Media Coating Names MAY be added without an update to this specification by prefixing the names with a reverse-DNS identifier, e.g. "org.pwg-my-coating". The format is defined by the following ABNF [STD68]:

vendor-coating-name = 1\*ALPHA 1\*dns-name "-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

dns-name = "." 1\*( ALPHA / DIGIT / "-" )

* 1. Custom Media Coating Names

Media Coating Names MAY be locally extended using a Custom Media Coating Name without an update to this specification by prefixing the names with the string "custom-", e.g. "custom-xyz-coating". The format is defined by the following ABNF [STD68]:

custom-coating-name = "custom-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

1. Media Source Names

Standard "media-source" names are defined in the IANA IPP Registry [IANA-IPP]. Localizations are provided in Table 9.

Table - Media Source Names

| **Name** | **Localized Name** |
| --- | --- |
| alternate | Alternate Tray |
| alternate-roll | Alternate Roll |
| auto | Automatic |
| bottom | Bottom Tray |
| by-pass-tray | Multipurpose Tray |
| center | Center Tray |
| disc | CD/DVD Feed |
| envelope | Envelope Feed |
| hagaki | Hagaki Tray |
| large-capacity | Large Capacity Tray |
| left | Left Tray |
| main | Main Tray |
| main-roll | Main Roll |
| manual | Manual Feed |
| middle | Middle Tray |
| photo | Photo Tray |
| rear | Rear Feed |
| roll-1 | Roll 1 |
| roll-2 | Roll 2 |
| roll-3 | Roll 3 |
| roll-4 | Roll 4 |
| roll-5 | Roll 5 |
| roll-6 | Roll 6 |
| roll-7 | Roll 7 |
| roll-8 | Roll 8 |
| roll-9 | Roll 9 |
| roll-10 | Roll 10 |
| side | Side Tray |
| top | Top Tray |
| tray-1 | Tray 1 |
| tray-2 | Tray 2 |
| tray-3 | Tray 3 |
| tray-4 | Tray 4 |
| tray-5 | Tray 5 |
| tray-6 | Tray 6 |
| tray-7 | Tray 7 |
| tray-8 | Tray 8 |
| tray-9 | Tray 9 |
| tray-10 | Tray 10 |
| tray-11 | Tray 11 |
| tray-12 | Tray 12 |
| tray-13 | Tray 13 |
| tray-14 | Tray 14 |
| tray-15 | Tray 15 |
| tray-16 | Tray 16 |
| tray-17 | Tray 17 |
| tray-18 | Tray 18 |
| tray-19 | Tray 19 |
| tray-20 | Tray 20 |

* 1. Vendor Media Source Names

Vendor Media Source Names MAY be added without an update to this specification by prefixing the names with a reverse-DNS identifier, e.g. "org.pwg-my-source". The format is defined by the following ABNF [STD68]:

vendor-source-name = 1\*ALPHA 1\*dns-name "-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

dns-name = "." 1\*( ALPHA / DIGIT / "-" )

* 1. Custom Media Source Names

Media Source Names MAY be locally extended using a Custom Media Source Name without an update to this specification by prefixing the names with the string "custom-", e.g. "custom-xyz-source". The format is defined by the following ABNF [STD68]:

custom-source-name = "custom-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

1. Media Tooth Names

Standard "media-tooth" names are defined in the IANA IPP Registry [IANA-IPP]. Localizations are provided in Table 10.

Table - Media Tooth Names

|  |  |
| --- | --- |
| **Name** | **Localized Name** |
| antique | Antique |
| calendared | Calendared |
| coarse | Coarse |
| fine | Fine |
| linen | Linen |
| medium | Medium |
| smooth | Smooth |
| stipple | Stipple |
| uncalendared | Uncalendared |
| vellum | Vellum |

* 1. Vendor Media Tooth Names

Vendor Media Tooth Names MAY be added without an update to this specification by prefixing the names with a reverse-DNS identifier, e.g. "org.pwg-my-tooth". The format is defined by the following ABNF [STD68]:

vendor-tooth-name = 1\*ALPHA 1\*dns-name "-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

dns-name = "." 1\*( ALPHA / DIGIT / "-" )

* 1. Custom Media Tooth Names

Media Tooth Names MAY be locally extended using a Custom Media Tooth Name without an update to this specification by prefixing the names with the string "custom-", e.g. "custom-xyz-tooth". The format is defined by the following ABNF [STD68]:

custom-tooth-name = "custom-" base-name

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

1. Conformance Requirements

Implementations conforming to this specification MUST:

1. Support media type names as defined in section 3,
2. Support color names as defined in section 4,
3. Support size names as defined in section 5,
4. Support coating names as defined in section 6,
5. Support source names as defined in section 7,
6. Support tooth names as defined in section 8,
7. Support the internationalization considerations defined in section 10, and
8. Support the security considerations defined in section 11.

Media Names defined in this specification are presented using lower case characters. Other referencing standards can impose case sensitive rules if necessary. For interoperability and implementation efficiency, this specification strongly recommends these names be used in the lower case form defined in this document.

1. Internationalization Considerations

For interoperability and basic support for multiple languages, conforming implementations MUST support:

1. The Universal Character Set (UCS) Transformation Format -- 8 bit (UTF-8) [STD63] encoding of Unicode [UNICODE] [ISO10646]; and
2. The Unicode Format for Network Interchange [RFC5198] which requires transmission of well-formed UTF-8 strings and recommends transmission of normalized UTF-8 strings in Normalization Form C (NFC) [UAX15].

Unicode NFC is defined as the result of performing Canonical Decomposition (into base characters and combining marks) followed by Canonical Composition (into canonical composed characters wherever Unicode has assigned them).

Localized names provided in this specification have been chosen to unambiguously identify the named media property for translation. See the PWG Sample English localization of registered IPP attributes and values [PWG-CATALOG] for an example of how these value can be localized.

1. Security Considerations

The media property names defined in this document require the same security considerations as defined in the IPP/1.1: Model and Semantics [RFC2911].

1. IANA Considerations
	1. Attribute Value Registrations

The keyword attribute values defined in this document will be published by IANA according to the procedures in the IPP/1.1: Model and Semantics [RFC2911] section 6.1 in the following file:

 http://www.iana.org/assignments/ipp-registrations

The registry entries will contain the following information:

Attributes (attribute syntax)

 Keyword Attribute Value Reference

 ----------------------- ---------

media (type3 keyword | name(MAX)) [RFC2911]

 asme\_f\_28x40in [PWG5101.1]

 iso\_2a0\_1189x1682mm [PWG5101.1]

 iso\_a0\_841x1189mm [PWG5101.1]

 iso\_a0x3\_1189x2523mm [PWG5101.1]

 iso\_a10\_26x37mm [PWG5101.1]

 iso\_a1\_594x841mm [PWG5101.1]

 iso\_a1x3\_841x1783mm [PWG5101.1]

 iso\_a1x4\_841x2378mm [PWG5101.1]

 iso\_a2\_420x594mm [PWG5101.1]

 iso\_a2x3\_594x1261mm [PWG5101.1]

 iso\_a2x4\_594x1682mm [PWG5101.1]

 iso\_a2x5\_594x2102mm [PWG5101.1]

 iso\_a3-extra\_322x445mm [PWG5101.1]

 iso\_a3\_297x420mm [PWG5101.1]

 iso\_a3x3\_420x891mm [PWG5101.1]

 iso\_a3x4\_420x1189mm [PWG5101.1]

 iso\_a3x5\_420x1486mm [PWG5101.1]

 iso\_a3x6\_420x1783mm [PWG5101.1]

 iso\_a3x7\_420x2080mm [PWG5101.1]

 iso\_a4-extra\_235.5x322.3mm [PWG5101.1]

 iso\_a4-tab\_225x297mm [PWG5101.1]

 iso\_a4\_210x297mm [PWG5101.1]

 iso\_a4x3\_297x630mm [PWG5101.1]

 iso\_a4x4\_297x841mm [PWG5101.1]

 iso\_a4x5\_297x1051mm [PWG5101.1]

 iso\_a4x6\_297x1261mm [PWG5101.1]

 iso\_a4x7\_297x1471mm [PWG5101.1]

 iso\_a4x8\_297x1682mm [PWG5101.1]

 iso\_a4x9\_297x1892mm [PWG5101.1]

 iso\_a5-extra\_174x235mm [PWG5101.1]

 iso\_a5\_148x210mm [PWG5101.1]

 iso\_a6\_105x148mm [PWG5101.1]

 iso\_a7\_74x105mm [PWG5101.1]

 iso\_a8\_52x74mm [PWG5101.1]

 iso\_a9\_37x52mm [PWG5101.1]

 iso\_b0\_1000x1414mm [PWG5101.1]

 iso\_b10\_31x44mm [PWG5101.1]

 iso\_b1\_707x1000mm [PWG5101.1]

 iso\_b2\_500x707mm [PWG5101.1]

 iso\_b3\_353x500mm [PWG5101.1]

 iso\_b4\_250x353mm [PWG5101.1]

 iso\_b5-extra\_201x276mm [PWG5101.1]

 iso\_b5\_176x250mm [PWG5101.1]

 iso\_b6\_125x176mm [PWG5101.1]

 iso\_b6c4\_125x324mm [PWG5101.1]

 iso\_b7\_88x125mm [PWG5101.1]

 iso\_b8\_62x88mm [PWG5101.1]

 iso\_b9\_44x62mm [PWG5101.1]

 iso\_c0\_917x1297mm [PWG5101.1]

 iso\_c10\_28x40mm [PWG5101.1]

 iso\_c1\_648x917mm [PWG5101.1]

 iso\_c2\_458x648mm [PWG5101.1]

 iso\_c3\_324x458mm [PWG5101.1]

 iso\_c4\_229x324mm [PWG5101.1]

 iso\_c5\_162x229mm [PWG5101.1]

 iso\_c6\_114x162mm [PWG5101.1]

 iso\_c6c5\_114x229mm [PWG5101.1]

 iso\_c7\_81x114mm [PWG5101.1]

 iso\_c7c6\_81x162mm [PWG5101.1]

 iso\_c8\_57x81mm [PWG5101.1]

 iso\_c9\_40x57mm [PWG5101.1]

 iso\_dl\_110x220mm [PWG5101.1]

 iso\_ra0\_860x1220mm [PWG5101.1]

 iso\_ra1\_610x860mm [PWG5101.1]

 iso\_ra2\_430x610mm [PWG5101.1]

 iso\_ra3\_305x430mm [PWG5101.1]

 iso\_ra4\_215x305mm [PWG5101.1]

 iso\_sra0\_900x1280mm [PWG5101.1]

 iso\_sra1\_640x900mm [PWG5101.1]

 iso\_sra2\_450x640mm [PWG5101.1]

 iso\_sra3\_320x450mm [PWG5101.1]

 iso\_sra4\_225x320mm [PWG5101.1]

 jis\_b0\_1030x1456mm [PWG5101.1]

 jis\_b10\_32x45mm [PWG5101.1]

 jis\_b1\_728x1030mm [PWG5101.1]

 jis\_b2\_515x728mm [PWG5101.1]

 jis\_b3\_364x515mm [PWG5101.1]

 jis\_b4\_257x364mm [PWG5101.1]

 jis\_b5\_182x257mm [PWG5101.1]

 jis\_b6\_128x182mm [PWG5101.1]

 jis\_b7\_91x128mm [PWG5101.1]

 jis\_b8\_64x91mm [PWG5101.1]

 jis\_b9\_45x64mm [PWG5101.1]

 jis\_exec\_216x330mm [PWG5101.1]

 jpn\_chou2\_111.1x146mm [PWG5101.1]

 jpn\_chou3\_120x235mm [PWG5101.1]

 jpn\_chou4\_90x205mm [PWG5101.1]

 jpn\_hagaki\_100x148mm [PWG5101.1]

 jpn\_kahu\_240x322.1mm [PWG5101.1]

 jpn\_kaku2\_240x332mm [PWG5101.1]

 jpn\_kaku3\_216x277mm [PWG5101.1]

 jpn\_kaku4\_197x267mm [PWG5101.1]

 jpn\_kaku5\_190x240mm [PWG5101.1]

 jpn\_kaku7\_142x205mm [PWG5101.1]

 jpn\_kaku8\_119x197mm [PWG5101.1]

 jpn\_oufuku\_148x200mm [PWG5101.1]

 jpn\_you4\_105x235mm [PWG5101.1]

 na\_10x11\_10x11in [PWG5101.1]

 na\_10x13\_10x13in [PWG5101.1]

 na\_10x14\_10x14in [PWG5101.1]

 na\_10x15\_10x15in [PWG5101.1]

 na\_11x12\_11x12in [PWG5101.1]

 na\_11x15\_11x15in [PWG5101.1]

 na\_12x19\_12x19in [PWG5101.1]

 na\_5x7\_5x7in [PWG5101.1]

 na\_6x9\_6x9in [PWG5101.1]

 na\_7x9\_7x9in [PWG5101.1]

 na\_9x11\_9x11in [PWG5101.1]

 na\_a2\_4.375x5.75in [PWG5101.1]

 na\_arch-a\_9x12in [PWG5101.1]

 na\_arch-b\_12x18in [PWG5101.1]

 na\_arch-c\_18x24in [PWG5101.1]

 na\_arch-d\_24x36in [PWG5101.1]

 na\_arch-e\_36x48in [PWG5101.1]

 na\_b-plus\_12x19.17in [PWG5101.1]

 na\_c5\_6.5x9.5in [PWG5101.1]

 na\_c\_17x22in [PWG5101.1]

 na\_d\_22x34in [PWG5101.1]

 na\_e\_34x44in [PWG5101.1]

 na\_edp\_11x14in [PWG5101.1]

 na\_eur-edp\_12x14in [PWG5101.1]

 na\_executive\_7.25x10.5in [PWG5101.1]

 na\_f\_44x68in [PWG5101.1]

 na\_fanfold-eur\_8.5x12in [PWG5101.1]

 na\_fanfold-us\_11x14.875in [PWG5101.1]

 na\_foolscap\_8.5x13in [PWG5101.1]

 na\_govt-legal\_8x13in [PWG5101.1]

 na\_govt-letter\_8x10in [PWG5101.1]

 na\_index-3x5\_3x5in [PWG5101.1]

 na\_index-4x6-ext\_6x8in [PWG5101.1]

 na\_index-4x6\_4x6in [PWG5101.1]

 na\_index-5x8\_5x8in [PWG5101.1]

 na\_invoice\_5.5x8.5in [PWG5101.1]

 na\_ledger\_11x17in [PWG5101.1]

 na\_legal-extra\_9.5x15in [PWG5101.1]

 na\_legal\_8.5x14in [PWG5101.1]

 na\_letter-extra\_9.5x12in [PWG5101.1]

 na\_letter-plus\_8.5x12.69in [PWG5101.1]

 na\_letter\_8.5x11in [PWG5101.1]

 na\_monarch\_3.875x7.5in [PWG5101.1]

 na\_number-10\_4.125x9.5in [PWG5101.1]

 na\_number-11\_4.5x10.375in [PWG5101.1]

 na\_number-12\_4.75x11in [PWG5101.1]

 na\_number-14\_5x11.5in [PWG5101.1]

 na\_number-9\_3.875x8.875in [PWG5101.1]

 na\_oficio\_8.5x13.4in [PWG5101.1]

 na\_personal\_3.625x6.5in [PWG5101.1]

 na\_quarto\_8.5x10.83in [PWG5101.1]

 na\_super-a\_8.94x14in [PWG5101.1]

 na\_super-b\_13x19in [PWG5101.1]

 na\_wide-format\_30x42in [PWG5101.1]

 oe\_photo-l\_3.5x5in [PWG5101.1]

 om\_dai-pa-kai\_275x395mm [PWG5101.1]

 om\_folio-sp\_215x315mm [PWG5101.1]

 om\_folio\_210x330mm [PWG5101.1]

 om\_invite\_220x220mm [PWG5101.1]

 om\_italian\_110x230mm [PWG5101.1]

 om\_juuro-ku-kai\_198x275mm [PWG5101.1]

 om\_large-photo\_200x300 [PWG5101.1]

 om\_medium-photo\_130x180mm [PWG5101.1]

 om\_pa-kai\_267x389mm [PWG5101.1]

 om\_postfix\_114x229mm [PWG5101.1]

 om\_small-photo\_100x150mm [PWG5101.1]

 om\_wide-photo\_100x200mm [PWG5101.1]

 prc\_10\_324x458mm [PWG5101.1]

 prc\_16k\_146x215mm [PWG5101.1]

 prc\_1\_102x165mm [PWG5101.1]

 prc\_2\_102x176mm [PWG5101.1]

 prc\_32k\_97x151mm [PWG5101.1]

 prc\_3\_125x176mm [PWG5101.1]

 prc\_4\_110x208mm [PWG5101.1]

 prc\_5\_110x220mm [PWG5101.1]

 prc\_6\_120x320mm [PWG5101.1]

 prc\_7\_160x230mm [PWG5101.1]

 prc\_8\_120x309mm [PWG5101.1]

 roc\_16k\_7.75x10.75in [PWG5101.1]

 roc\_8k\_10.75x15.5in [PWG5101.1]

media-color (type3 keyword | name(MAX)) [PWG5100.3]

 black [PWG5101.1]

 brown [PWG5101.1]

 clear-black [PWG5101.1]

 clear-blue [PWG5101.1]

 clear-brown [PWG5101.1]

 clear-buff [PWG5101.1]

 clear-cyan [PWG5101.1]

 clear-gold [PWG5101.1]

 clear-goldenrod [PWG5101.1]

 clear-gray [PWG5101.1]

 clear-green [PWG5101.1]

 clear-ivory [PWG5101.1]

 clear-magenta [PWG5101.1]

 clear-multi-color [PWG5101.1]

 clear-mustard [PWG5101.1]

 clear-orange [PWG5101.1]

 clear-pink [PWG5101.1]

 clear-red [PWG5101.1]

 clear-silver [PWG5101.1]

 clear-turquoise [PWG5101.1]

 clear-violet [PWG5101.1]

 clear-white [PWG5101.1]

 clear-yellow [PWG5101.1]

 cyan [PWG5101.1]

 dark-blue [PWG5101.1]

 dark-brown [PWG5101.1]

 dark-buff [PWG5101.1]

 dark-cyan [PWG5101.1]

 dark-gold [PWG5101.1]

 dark-goldenrod [PWG5101.1]

 dark-gray [PWG5101.1]

 dark-green [PWG5101.1]

 dark-ivory [PWG5101.1]

 dark-magenta [PWG5101.1]

 dark-mustard [PWG5101.1]

 dark-orange [PWG5101.1]

 dark-pink [PWG5101.1]

 dark-red [PWG5101.1]

 dark-silver [PWG5101.1]

 dark-turquoise [PWG5101.1]

 dark-violet [PWG5101.1]

 dark-yellow [PWG5101.1]

 gold [PWG5101.1]

 light-black [PWG5101.1]

 light-blue [PWG5101.1]

 light-brown [PWG5101.1]

 light-buff [PWG5101.1]

 light-cyan [PWG5101.1]

 light-gold [PWG5101.1]

 light-goldenrod [PWG5101.1]

 light-gray [PWG5101.1]

 light-green [PWG5101.1]

 light-ivory [PWG5101.1]

 light-magenta [PWG5101.1]

 light-mustard [PWG5101.1]

 light-orange [PWG5101.1]

 light-pink [PWG5101.1]

 light-red [PWG5101.1]

 light-silver [PWG5101.1]

 light-turquoise [PWG5101.1]

 light-violet [PWG5101.1]

 light-yellow [PWG5101.1]

 magenta [PWG5101.1]

 multi-color [PWG5101.1]

 mustard [PWG5101.1]

 silver [PWG5101.1]

 turquoise [PWG5101.1]

 violet [PWG5101.1]

media-type (type3 keyword | name(MAX)) [PWG5100.3]

 auto [PWG5101.1]

 disc-glossy [PWG5101.1]

 disc-high-gloss [PWG5101.1]

 disc-matte [PWG5101.1]

 disc-satin [PWG5101.1]

 disc-semi-gloss [PWG5101.1]

 envelope-archival [PWG5101.1]

 envelope-bond [PWG5101.1]

 envelope-coated [PWG5101.1]

 envelope-cotton [PWG5101.1]

 envelope-fine [PWG5101.1]

 envelope-heavyweight [PWG5101.1]

 envelope-inkjet [PWG5101.1]

 envelope-lightweight [PWG5101.1]

 envelope-preprinted [PWG5101.1]

 fabric [PWG5101.1]

 fabric-archival [PWG5101.1]

 fabric-glossy [PWG5101.1]

 fabric-high-gloss [PWG5101.1]

 fabric-matte [PWG5101.1]

 fabric-semi-gloss [PWG5101.1]

 fabric-waterproof [PWG5101.1]

 glass [PWG5101.1]

 glass-colored [PWG5101.1]

 glass-opaque [PWG5101.1]

 glass-surfaced [PWG5101.1]

 glass-textured [PWG5101.1]

 labels-colored [PWG5101.1]

 labels-glossy [PWG5101.1]

 labels-high-gloss [PWG5101.1]

 labels-inkjet [PWG5101.1]

 labels-matte [PWG5101.1]

 labels-permanent [PWG5101.1]

 labels-satin [PWG5101.1]

 labels-security [PWG5101.1]

 labels-semi-gloss [PWG5101.1]

 metal [PWG5101.1]

 metal-glossy [PWG5101.1]

 metal-high-gloss [PWG5101.1]

 metal-matte [PWG5101.1]

 metal-satin [PWG5101.1]

 metal-semi-gloss [PWG5101.1]

 photographic-archival [PWG5101.1]

 plastic [PWG5101.1]

 plastic-archival [PWG5101.1]

 plastic-colored [PWG5101.1]

 plastic-glossy [PWG5101.1]

 plastic-high-gloss [PWG5101.1]

 plastic-matte [PWG5101.1]

 plastic-satin [PWG5101.1]

 plastic-semi-gloss [PWG5101.1]

 self-adhesive-film [PWG5101.1]

 stationery-archival [PWG5101.1]

 stationery-cotton [PWG5101.1]

 stationery-heavyweight-coated [PWG5101.1]

 transfer [PWG5101.1]

1. Collected ABNF

The following ABNF [STD68] grammar defines the syntax of valid names in this specification. This ABNF is also available online [MSN-ABNF].

; PWG ISTO 5101.1 ABNF DEFINITIONS

;

; Last Update: March 28, 2013

;

; This document contains the current ABNF definitions for the PWG Media

; Standardized Names Specification, PWG ISTO Document Number 5101.1. The

; ABNF definitions contained herein, if different from the definitions in

; the specification, supercede those present in the specification.

;

; NOTE: This ABNF allows for a mix of uppercase and lowercase letters in

; names, however specific bindings such as the Internet Printing Protocol

; only allow for lowercase letters.

;

; 3 Media Type Names

type-name = custom-type-name / derived-type-name / standard-type-name /

 vendor-type-name

custom-type-name = "custom-" base-name

derived-type-name = "derived-" base-name "\_"

 ( base-name / custom-type-name / vendor-type-name )

standard-type-name = keyword

vendor-type-name = 1\*ALPHA 1\*dns-name "-" base-name

; 4 Color Names

color-name = custom-color-name / standard-color-name / vendor-color-name

custom-color-name = "custom-" base-name

 \*( "\_" red-color green-color blue-color

 [ alpha-color ] )

standard-color-name = keyword

vendor-color-name = 1\*ALPHA 1\*dns-name "-" base-name

 \*( "\_" red-color green-color blue-color

 [ alpha-color ] )

red-color = 2HEXDIG

green-color = 2HEXDIG

blue-color = 2HEXDIG

alpha-color = 2HEXDIG

; 5 Media Size Names

media-size-self-describing-name =

 media-size-name / "choice" 2\*( "\_" media-size-name )

media-size-name = class-in "\_" base-name "\_" short-dim "x" long-dim "in" /

 class-mm "\_" base-name "\_" short-dim "x" long-dim "mm" /

 "disc\_" base-name "\_" inner-dim "x" outer-dim "mm"

class-in = "custom" / "na" / "asme" / "roc" / "oe" / "roll"

class-mm = "custom" / "iso" / "jis" / "jpn" / "prc" / "om" / "roll"

short-dim = dim

long-dim = dim / "0"

inner-dim = dim

outer-dim = dim

dim = integer-part [fraction-part] / "0" fraction-part

integer-part = non-zero-digit \*DIGIT

fraction-part = "." \*DIGIT non-zero-digit

; 6 Media Coating Names

coating-name = custom-coating-name / standard-coating-name /

 vendor-coating-name

custom-coating-name = "custom-" base-name

standard-coating-name = keyword

vendor-coating-name = 1\*ALPHA 1\*dns-name "-" base-name

; 7 Media Source Names

source-name = custom-source-name / standard-source-name / vendor-source-name

custom-source-name = "custom-" base-name

standard-source-name = keyword

vendor-source-name = 1\*ALPHA 1\*dns-name "-" base-name

; 8 Media Tooth Names

tooth-name = custom-tooth-name / standard-tooth-name / vendor-tooth-name

custom-tooth-name = "custom-" base-name

standard-tooth-name = keyword

vendor-tooth-name = 1\*ALPHA 1\*dns-name "-" base-name

; Common rules

base-name = ( ALPHA / DIGIT ) \*( ALPHA / DIGIT / "-" / "." )

dns-name = "." 1\*( ALPHA / DIGIT / "-" )

keyword = ALPHA 1\*( ALPHA / DIGIT / "-" / "\_" / ".")

non-zero-digit = %x31-39

; EOF

1. Parser Considerations for the Media Size Name (Informative)

Special consideration needs to be made during the development of a parser for the Media Size Name. Since additional "class" names and "size-names" will be defined in the future, in many cases the parser cannot be strictly conformant to the ABNF. The following is intended to provide guidelines for the development of client parsers and device parsers.

* 1. Client Parsers

There are several degrees of client which display something to the user for selection and MAY format documents (where it would need to know the dimensions):

Non-formatting client**;** In this case, the parser treats the string as a unit and can simply display it to the user as is, no parsing is required. If the parser localizes and finds a string that it doesn't recognize, then it can just display the entire string as received, or perhaps breaks it up into separate pieces separated by a space. Such a client most likely doesn't format documents, so it will not even care about the dimensions, only the user and Printer do.

Client does formatting; Now the client will separate the class field, the name field, and the dimension field. The class and name fields can be displayed as is or localized, and the dimensions are converted to the units preferred by the user. If a class or name field isn't recognized, it will be displayed as is, perhaps with underlines replaced by spaces. The dimensions will also be converted to the internal units for formatting documents.

* 1. Device Parsers

On the Printer side, there are two cases to consider, the one that doesn't support client's inventing custom sizes and the one that does. If the Printer displays media sizes to an operator or on a control panel, then that parser code has the same problems as the client (see above):

Device doesn't support client-defined custom sizes; In this situation the parser doesn't even need to parse the string. It simply compares the entire string with a list of supported strings, including system administrator defined custom sizes. If there isn't a match, the Printer doesn't support that requested size and takes the appropriate action.

Device supports client-invented custom sizes; Here the Printer parser MUST look at the class field for "custom", then parse the dimensions and check for a valid range and then possibly convert to the Printer's internal units.

1. References
	1. Normative References

[ASME-IN] The American Society of Mechanical Engineers, "Decimal Inch Drawing Sheet Size and Format", ASME Y14-1995

[ASME-M] The American Society of Mechanical Engineers, "Metric Drawing Sheet Size and Format", ASME Y14.M-1995

[IEEE1284.1] "IEEE Standard for Information Technology, Transport Independent Printer/System Interface", IEEE Std 1284.1-1997

[ISO10175] "Document Printing Application", ISO/IEC 10175, June 1996

[ISO10646] "Information technology -- Universal Coded Character Set (UCS)", ISO/IEC 10646:2011

[PWG5100.3] K. Ocke, T. Hastings, "IPP Production Printing Attributes – Set 1", PWG 5100.3-2001, February 2001, ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippprodprint10-20010212-5100.3.pdf

[RFC2119] S. Bradner, "Key words for use in RFCs to Indicate Requirement Levels", RFC 2119/BCP 14, March 1997, http://www.ietf.org/rfc/rfc2119.txt

[RFC2534] Masinter, L., et al, “Media Features for Display, Print, and Fax”, RFC 2534, March 1999, http://www.ietf.org/rfc/rfc2534.txt

[RFC2911] Hastings, T., Herriot, R., deBry, R., Isaacson, S., and P. Powell, “Internet Printing Protocol/1.1: Model and Semantics”, RFC 2911, September 2000, http://www.ietf.org/rfc/rfc2911.txt

[RFC3805] Smith, R., Wright, F., Hastings, T., Zilles, S., Gyllenskog, J., “Printer MIB”, RFC 1759, March 1995, http://www.ietf.org/rfc/rfc3805.txt

[RFC5198] J. Klensin, M. Padlipsky, "Unicode Format for Network Interchange", RFC 5198, March 2008, http://www.ietf.org/rfc/rfc5198.txt

[STD63] F. Yergeau, "UTF-8, a transformation format of ISO 10646", RFC 3629/STD 63, November 2003, http://www.ietf.org/rfc/rfc3629.txt

[STD68] D. Crocker, P. Overell; "Augmented BNF for Syntax Specifications: ABNF", STD 68/RFC 5234, January 2008, http://www.ietf.org/rfc/rfc5234.txt

[UAX15] M. Davis, M. Duerst, "Unicode Normalization Forms", Unicode Standard Annex 15, March 2008, http://www.unicode.org/reports/tr15/

* 1. Informational References

[IANA-IPP] "Internet Printing Protocol (IPP) Registrations", http://www.iana.org/assignments/ipp-registrations

[JTAPI] "Job Ticket API Project of the Open Printing Work Group", http://wiki.linuxfoundation.org/en/OpenPrinting/JTAPI

[MSN-ABNF] "PWG Media Names ABNF", ftp://ftp.pwg.org/pub/pwg/informational/pwg5101.1-media-name-abnf.txt

[PWG5101.1-2002] R. Bergman, T. Hastings, "PWG Standard for Media Standardized Names", PWG 5101.1-2002, February 2002, ftp://ftp.pwg.org/pub/pwg/candidates/cs-pwgmsn10-20020226-5101.1.pdf

[PWG-CATALOG] Sample English localization of registered IPP attributes and values, ftp://ftp.pwg.org/pub/pwg/ipp/examples/ipp.strings

1. Authors' Addresses

Michael Sweet

Apple Inc.

10431 N. De Anza Blvd.

MS 38-4LPT

Cupertino CA 95014

Ron Bergman

RGBergman@hotmail.com

Tom Hastings

tom.hastings@alum.mit.edu

Additional contributors:

Roelof Hamberg - ESI

Harry Lewis - Ricoh

Jim Lo

Daniel Manchala - Xerox

Glen Petrie - Epson

Alan Sukert - Xerox

Peter Zehler - Xerox