Printer Management Interface
Management Object Summary

Version 0.4

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Enumerations

This working group has defined several type of enumerations. These enumerations differ in the method employed to control the addition of new enumerations. Throughout this document, references to "enum(n)", where N can be 1, 2 or 3 can be found in the various tables. The definitions of these types of enumerations are:

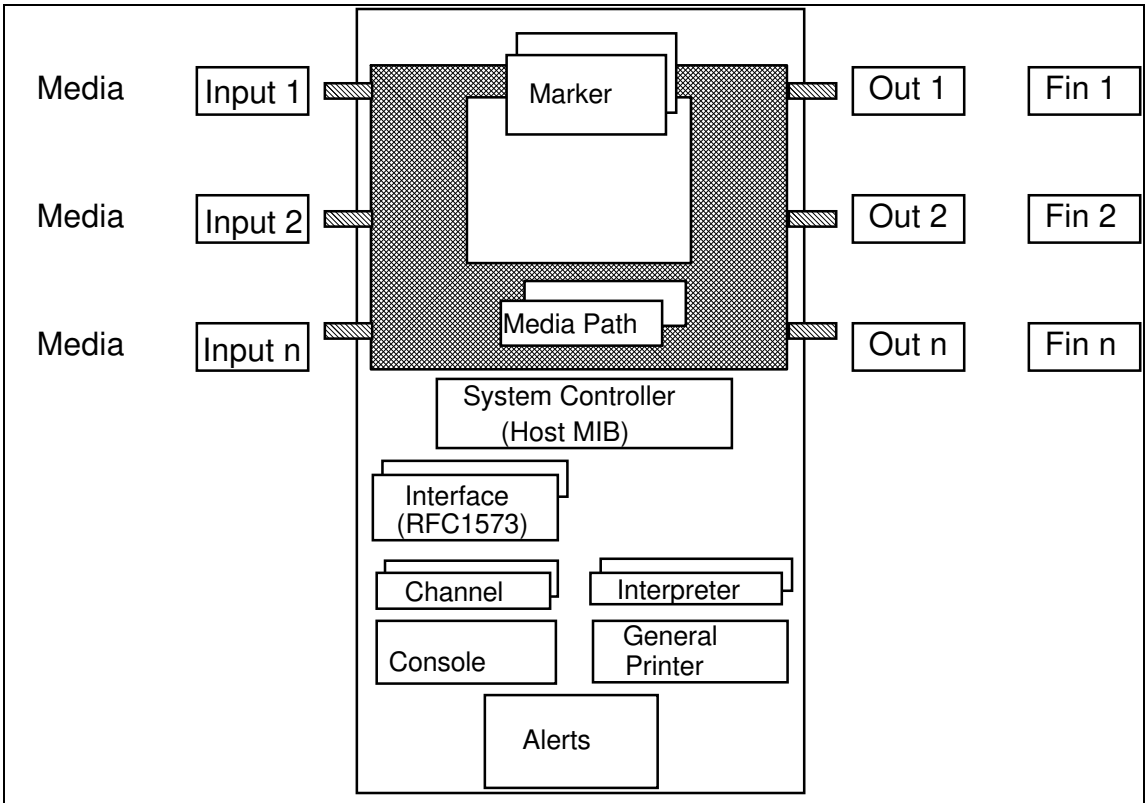
ENUM(1) Additional enumerated values require a new RFC.

ENUM(2) Additional enumerated values are registered after review by this working group

ENUM(3) Additional enumerated values are registered without working group review.

Printer Model

This working group has developed a model of a printer which is useful in understanding the classification of the various object. Graphically this model is as shown below:



Printer Groups of the Printer Model (Updated)

Printer Component

To be supplied by DMTF to correspond to MIB II

DMTF MIF "Component ID: (From DMI Specification - Draft 4.2 - 12 January 1994)

1.	Manufacturer	String64	Name of the organization that produces this component.
2.	Product	String64	Name of this Printer
3.	Version	String64	
4.	Serial Number	String64	
5.	Installation	Date	Time and Date of the Last Installation
6.	Verify	Integer	Verification Level for this printer

"Asking for the 'Verify' attribute causes the component instrumentation code to perform checks to verify that the component is still in the system and working properly. It should return on of the following values:

Value	Meaning
0	An error occurred; Check status code
1	Component does not exist
2	Verify not supported
4	Component exists, functionally untested
5	Component exists, functionally unknown
6	Component exists, functionally no good
7	Component exists, functionally good

RFC 1573

This is a place holder for the RFC 1573 objects.....

General Printer Group Objects

prtGeneral	Mandatory			
Object Name	**Access**	**Type**	**Value**	**Description**
Status	Read-Only	Octet	PrintStatus	Overall Printer Status
ConfigChange	Read-Only	Counter32		Counts configuration changes
CurrentLocalization	Read-Write	Integer		Index into the localization table specifying the current language, country and character set for description object/attribute string values

Notes:

prtGeneral	Mandatory	prtSkinTable		
Object Name	**Access**	**Type**	**Value**	**Description**
ID	Read-Only	Integer32		Index of Skin component
Description	Read-Only	String		Manufacturer provided skin component name
Status	Read-Only	Enum(2)	SkinStatus	

Notes:

prtGeneral	Mandatory	prtLocalizationTable		
Object Name	**Access**	**Type**	**Value**	**Description**
Language	Read-Only	String(2)		A two character language code from ISO639
Country	Read-Only	String(2)		A two character country code from ISO3166
CharacterSet	Read-Only	Integer		An index into the character set table identifying the character set used for thislocalization

Notes:

prtGeneral	Mandatory	prtCharacterSetTable		
Object Name	**Access**	**Type**	**Value**	**Description**
CharacterSet	Read-Only	String		A characterset name or ID that identifies the character set
Description	Read-Only	String		Description of this character set

Notes:

prtGeneral - Extended	Optional			
Object Name	**Access**	**Type**	**Value**	**Description**
Reset	Write-Only	Integer		Writing a 1 simulates a power cycle
ResetSpecial	Write-Only	Enum (3)	ResetType	Writing a 1 causes a special reset

Notes:

Input Group Objects - Mandatory

prtInput	Mandatory			
Object Name	**Access**	**Type**	**Value**	**Description**
DefaultID	Read-Write	Integer		ID of the Default Input Component

Notes:

prtInput	Mandatory		prtInputTable	
Object Name	**Access**	**Type**	**Value**	**Description**
ID	Read-Only	Integer32		Value used by the printer to identify associated input device
Type	Read-Only	Enum (2)	InputType	
DimUnits	Read-Only	Enum (1)	PhyMediaUnit	
CurDimAcrossFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
CurDimFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
CapacityUnit	Read-Only	Enum (1)	PhyMediaUnit	
MaxCapacity	Read-Write	Integer32		-1 = Other, -2 = Unknown
CurrentCapacity	Read-Write	Integer32		-1 = Other, -2 = Unknown
Status	Read-Only	Enum	EntStatus	Current Status of Input Device
MediaName	Read-Write	String		"Hillary's Pink Presidential Letterhead"
MediaSize	Read-Write	Enum (1)	MediaSize	ISO, JIS & North American media size identifiers

Notes:

Input Group Objects - Optional

prtInput - TypeExtended	Optional		prtInputTabelAugment	
Object Name	**Access**	**Type**	**Value**	**Description**
Name	Read-Write	String		Name assigned to this device
VendorName	Read-Only	String		
Model	Read-Only	String		
Version	Read-Only	String		
SerialNumber	Read-Only	String		
Description	Read-Only	String		
Security	Read-Write	Enum (2)	YesNo-OnOff	Indication if the Device has some security associated with it. **Note 1**

Notes:
1. Does there need to be an optional object that elaborates on the type of input security available?

prtInput - DimExtended	Optional		prtInputTableAugment	
Object Name	**Access**	**Type**	**Value**	**Description**
PrintAreaOffsetAcrossFeed	Read-Only	Integer32		-1 = Other, -2 = Unknown
PrintAreaExtentAcross Feed	Read-Only	Integer32		-1 = Other, -2 = Unknown
PrintAreaOffset Feed	Read-Only	Integer32		-1 = Other, -2 = Unknown
PrintAreaExtent Feed	Read-Only	Integer32		-1 = Other, -2 = Unknown

Note:

prtInput - MediaExtended	Optional		prtInputTableAugment	
Object Name	**Access**	**Type**	**Value**	**Description**
MediaDimUnits	Read-Only	Enum (2)	PhyMediaUnits	Units used in the dimensions of media
MediaDimAcrossFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
MediaDimFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
MediaWeight	Read-Write	Integer32	grams/meter^2	-1 = Other, -2 = Unknown
MediaType	Read-Write	String		ISO10175 (DPA) & ISO10180 (SPDL) Definitions
MediaColor	Read-Write	String		ISO10175 (DPA) & ISO10180 (SPDL) Definitions
MediaFormParts	Read-Write	Integer32		-1 = Other, -2 = Unknown

Notes:

Output Group Objects - Mandatory

prtOutput	Mandatory			
Object Name	**Access**	**Type**	**Value**	**Description**
DefaultID	Read-Write	Integer		ID of Default Output Device

Notes:

prtOutput	Mandatory		prtOutputTable	
Object Name	**Access**	**Type**	**Value**	**Description**
ID	Read-Only	Integer32		Value used by the printer to identify associated output device.
Type	Read-Only	Enum (2)	OutputType	
CapacityUnit	Read-Only	Enum (1)	PhyMediaUnit	
MaxCapacity	Read-Write	Integer32		-1 = Other, -2 = Unknown
CurrentCapacity	Read-Write	Integer32		-1 = Other, -2 = Unknown
Status	Read-Only	Enum	EntStatus	

Notes:

Output Group Objects - Optional

prtOutput - TypeExtended	Optional		prtOutputTableAugment	
Object Name	**Access**	**Type**	**Value**	**Description**
Name	Read-Write	String		Name assigned to this Device
VendorName	Read-Only	String		
Model	Read-Only	String		
Version	Read-Only	String		
SerialNumber	Read-Only	String		
Description	Read-Only	String		
Security	Read-Write	Enum (2)	YesNo-OnOff	**Note 1, Note 2**

Notes:
1. I Propose that Device Security be moved from the Output Type Features subclass to be consistent with Input Device
2. Does there need to be an optional object that elaborates on the type of output security available?

prtOutput - DimExtended	Optional		prtOutputTableAugment	
Object Name	**Access**	**Type**	**Value**	**Description**
DimUnit	Read-Only	Enum (1)	PhyMediaUnit	
CurDimAcrossFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
CurDimFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
MaxDimAcrossFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
MaxDimFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
MinDimAcrossFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown
MinDimFeedDir	Read-Write	Integer32		-1 = Other, -2 = Unknown

Notes:

prtOutput - Features	Optional		prtOutputTableAugment	
Object Name	**Access**	**Type**	**Value**	**Description**
StackingOrder	Read-Only	Enum (1)	StackingOrder	
Bursting	Read-Write	Enum (1)	YesNo-OnOff	
Decollating	Read-Write	Enum (1)	YesNo-OnOff	
PageCollated	Read-Write	Enum (1)	YesNo-OnOff	
Job Collated	Read-Write	Enum (1)	YesNo-OnOff	
OffsetStacking	Read-Write	Enum (1)	YesNo-OnOff	
Slipsheet	Read-Write	Enum (1)	YesNo-OnOff	
DeviceSecurity	Read-Only	Enum (1)	YesNo-OnOff	**Note1, Note 2**

Notes
1. I Propose that Device Security be moved to the Output Type Extened subclass to be consistent with Input Device
2. Does there need to be an optional object that elaborates on the type of output security available?

prtOutput - Associated Finisher	Optional		??	
Object Name	**Access**	**Type**	**Value**	**Description**
Stitching	Read-Only	String		
Folding	Read-Only	String		
Binding	Read-Only	String		
Punching	Read-Only	String		
Trimming	Read-Only	String		
Insertion	Read-Only	String		

Notes:

Finisher Group Objects - Optional

prtFinisher	Optional			
Object Name	**Access**	**Type**	**Value**	**Description**
DefaultID	Read-Write	Integer32		0 = Finisher Not Used in Default Configuration

Notes:

prtFinisher	Optional		prtFinisherTable	
Object Name	**Access**	**Type**	**Value**	**Description**
ID	Read-Only	String		**Note 1** Value used by the printer to identify associated finisher device.
Type	Read-Only	String		**Note 2**
NamedFinishing	Read-Only	String		**Note 3**
ConsumableUnit	Read-Only	String		**Note 4**
MaxConsumableCapacity	Read-Write	Integer32		**Note 4** -1 = Other, -2 = Unknown
CurrentConsumableCapacity	Read-Write	Integer32		**Note 4** -1 = Other, -2 = Unknown
Status	Read-Only	Enum	EntStatus	Current Status of Device

Notes: Above definition came from Printer Management Objects

1. The ID object being a string is inconsistent with the rest of the objects. The ID should be an integer.
2. The Type object being a string is inconsistent with the rest of the objects. The Type should be an enumeration with the enumeration's being of the value defined in FinisherType Enumeration Table.
3. The NamedFinishing object being a string is inconsistent with other like objects. Should it be an Enumeration or a string?
4. This approach limits each finisher to one "Consumable" and no provision has not been made for "receptacles" or "containers" that contain waste materials such as produced by a hole punch. Also it is possible that a particular finisher may have "supplies" and "waste".

Marker Group Objects - Mandatory

prtMarker	Mandatory			
Object Name	**Access**	**Type**	**Value**	**Description**
DefaultID	Read-Write	Integer32		ID of Default Marker

Notes:

prtMarker	Mandatory		prtMarkerTable	
Object Name	**Access**	**Type**	**Value**	**Description**
ID	Read-Only	Integer32		Value used by the printer to identify associated marker device.
MarkTech	Read-Only	Enum (1)	MarkingTech	Type of Marking Technology used for this making device
CounterUnits	Read-Only	Enum (1)	CounterUnits	Units that will be used to report counter values
LifeCount	Read-Only	Counter32		Life of printer counter in **CounterUnits**
PowerOnCount	Read-Only	Counter32		Number of units counted since power on in **CounterUnits**
ProcessColorant	Read-Only	Integer32		Number of Process Colors (-1 = Other, -2 = Unknown)
SpotColorant	Read-Only	Integer32		Number of Spot Colors (-1 = Other, -2 = Unknown)
AddressabilityUnit	Read-Only	Enum (1)	AddrUnits	Resolution Unit
AddressabilityFeedDir	Read-Only	Integer32		Feed Resolution (-1 = Other, -2 = Unknown)
AddressabilityCrossFeedDir	Read-Only	Integer32		CrossFeed Resolution (-1 = Other, -2 = Unknown)
Status	Read-Only	Enum	EntStatus	Current Status of Marker Component

Notes:

prtMarkerSupplies	Mandatory			prtMarkerSuppliesTable
Object Name	**Access**	**Type**	**Value**	**Description**
MarkerID	Read-Only	Integer32		ID of this supply entity
ColorantID	Read-Only	Integer32		Associate Colorant ID (0 if none)
Class	Read-Only	Enum (1)	MkrSupClass	Class (Supply or receptacle)
Type	Read-Only	Enum(3)	MkrSupType	Type of supply
Description	Read-Only	String		Description of the supply or receptacle
SupplyUnit	Read-Only	Enum(3)	MkrSupUnit	Units of the marker supply container/receptacle
MaxCapacity	Read-Only	Integer32		Maximum capacity expressed in SupplyUnit
CurrentLevel	Read-Only	Integer32		Current level expressed in SupplyUnit

Notes:

prtMarkerColorant	Optional		prtMarkerColorantTable	
Object Name	**Access**	**Type**	**Value**	**Description**
ColorantID	Read-Only	Integer32		ID of this colorant
MarkerID	Read-Only	Integer32		ID of Marker that this colorant entry is associated with.
Role	Read-Only	Enum (1)	ColoranRole	Role played by this colorant
Order	Read-Only	Integer		Ordinal number of this colorant in the order in which colorants are imaged onto the medium within its role.
Value	Read-Only	String	ColorantValue	Name of the color.
Tonality	Read-Only	Integer32		Number of levels of tonality. Must be at least 2.

Notes:

Media Path Group Objects - Mandatory

prtMediaPath	Mandatory			
Object Name	**Access**	**Type**	**Value**	**Description**
DefaultID	Read-Write	Integer		ID number of the default Media Path
MaxSpeedPrintUnit	Read-Only	Enum (1)	SpeedPrintUnit	Numerator units of print speed
MaxSpeedTimeUnit	Read-Only	Enum (1)	SpeedTimeUnit	Denominator units of print speed
PhyMediaUnit	Read-Only	Enum (1)	PhyMediaUnit	Units of media size

Notes:

prtMediaPath	Mandatory		prtMediaPathTable	
Object Name	**Access**	**Type**	**Value**	**Description**
ID	Read-Only	Integer32		Value used by printer to identify Medai Path
MaxSpeed	Read-Only	Integer32		-1 = Other, -2 = Unknown
MaxMediaFeedDir	Read-Only	Integer32		-1 = Other, -2 = Unknown
MaxMediaAcrossFeedDir	Read-Only	Integer32		-1 = Other, -2 = Unknown
MinMediaFeedDir	Read-Only	Integer32		-1 = Other, -2 = Unknown
MinMediaAcrossFeedDir	Read-Only	Integer32		-1 = Other, -2 = Unknown
MediaPathType	Read-Only	Enum()	MediaPathType	
MediaPathDescription	Read-Only	String		Manufacturer provided description of this Media Path
Status	Read-Only	Enum	EntStatus	Status of this Media Path

Notes:

Media Path Device Group Objects - Optional (DELETED)

prtMediaPathDevice	Optional			
Object Name	**Access**	**Type**	**Value**	**Description**

Notes:

prtMediaPathDevice	Optional		prtMediaPathDeviceTable	
Object Name	**Access**	**Type**	**Value**	**Description**

Notes:

Channel Group Objects

prtChannel	Mandatory		prtChannelTable	
Object Name	**Access**	**Type**	**Value**	**Description**
ChannelIndex	Read-Only	Integer32		Index of channels
CurrentJobCntlLang	R/W	Integer		Pointer to Interpreter Table
DefaultPageDescLang	R/W	Integer		Pointer to Interpreter Table
ChannelActive	R/W	Enum(1)		State of the Channel
ChannelType	Read-Only	Enum(2)		Type of Channel
UnderlyingGroup	Read-Write	?		Transmission Group which provides the underlying transport
UnderlyingIndex	Read-Write	Integer		Indentifies the index of the table entry in the group identified by UnderlyingGroup that provides the underlying transport for this channel

Notes:

Console Group Objects

prtDisplayConsole				
Object Name	**Access**	**Type**	**Value**	**Description**
Localization Index	Read-Write	Integer32		Index into localization table
NumberOf DisplayLines	Read-Only	Integer32		Number of lines on the display
NumberOfDisplayChars	Read-Only	Ineger32		Number of Characters per Lines

prtOperatorConsole	Mandatory		prtConsoleDisplayTable	
Object Name	**Access**	**Type**	**Value**	**Description**
LineIndex	Read-Only	Integer32		Index into display
LineText	Read-Write	String		Text on or to be written to the display

Notes: Issue - what about a one line display but with multiple lines which can be scrolled by the operator??

prtOperatorConsole	Mandatory		prtConsoleLightsTable	
Object Name	**Access**	**Type**	**Value**	**Description**
LightID	Read-Only	Integer32		Index of lights
OnTime	Read-Only	Integer32		On time in milliseconds of blinking (0=off always)
OffTime	Read-Only	Integer32		Off time in milliseconds of blinking (0=on always)
OffColor	Read-Only	Enum(2)	Light Color	Color of the light when off
OnColor	Read-Only	Enum(2)	Light Color	Color of the light when on
Description	Read-Only	String		Vendor Description of what the light does

Notes: Is this "Console" or "Operator Console"

Interpreter Group Objects - Mandatory

prtInterpreter	Mandatory			
Object Name	**Access**	**Type**	**Value**	**Description**
DefaultID	Read-Write	Integer	IntpLangFam	

Notes:

prtInterpreter	Mandatory		prtInterpreterTable	
Object Name	**Access**	**Type**	**Value**	**Description**
Index	Read-Only	Integer		A unique value for each PDL or control language
LangFamily	Read-Only	Enum(2)	IntpLangFam	
LangLevel	Read-Only	String		
LangVersion	Read-Only	String		
Description	Read-Only	String		
Version	Read-Only	String		
FeedAddressability	Read-Only	Integer32		-1 = Other, -2 = Unknown
CrossFeedAddressability	Read-Only	Integer32		-1 = Other, -2 = Unknown
DefaultOrientation	Read-Write	Enum (1)	MediaOrientation	
DefaultCharSetIn	Read-Write	Integer		An index into the CharacterSetTable that identifies the default character set for data into the interpreter
DefaultCharSetOut	Read-Write	Integer		An index into the CharacterSetTable that identifies the default character set for data coming fromthe interpreter through the printer's output channel
TwoWay	Read-Only	Enum(1)	YesNo-OnOff	This object indicates whether or not the interpreter returns information back across the data channel.

Notes: Should DefaultOrientation be included???

Alerts Group Object - Mandatory

prtAlert	Mandatory		prtAlertTable	
Object Name	**Access**	**Type**	**Value**	**Description**
Index	Read-Only	Integer32		
SeverityLevel	Read-Only	Enum ( )		
InfoClass	Read-Only	Enum ( )	Inform Class	
Group	Read-Only	Enum ( )		
Group Index	Read-Only	Integer		
Location	Read-Only	Integer		
Alert Code	Read-Only	Enum ( )		
Description	Read-Only	String		

Notes:

Group Status

Printer Status

Bit	Meaning
0	Non-critical State exists
1	Critical State exists
2	On Request
3	Unavailable
4	Busy / Temporarily Unavailable
5	Line Status Bit 0
6	Line Status Bit 1
7	Not Used

Bit 6	Bit 7	Meaning
0	0	On Line
0	1	Pending On Line
1	0	Pending Off Line
1	1	Off Line

EntStatus

1	Other
2	Unknown
3	Ready/Available
4	Critical State
5	Non-critical state
6	Both Critical and Non-critical state
7	On-request
8	Unavailable
9	Busy/Temp Unavailable

PMI Enumerations - Units

Addressabililty Unit	**Physical Media Unit**	**Counter Unit**
1 Other	1 Other	1 Other
2 Unknown	2 Unknown	2 Unknown
3 Inches	3 Inches	3 Characters
4 Centimeters	4 Millimeters	4 Lines
	5 Sheets	5 Impressions
		6 Inches
		7 Feet
		8 Millimeters
		9 Sheets
		10 Seconds
		11 Minutes
		12 Hours
Speed Print Unit	**Speed Time Unit**	**Finisher Consumable Unit**
1 Other	1 Other	1 Other
2 Unknown	2 Unknown	2 Unknown
3 Characters	3 Seconds	
4 Lines	4 Minutes	
5 Impressions	5 Hours	
6 Inches		
7 Feet		
8 Millimeters		
9 Meters		
10 Sheets		
Marker Supply Units		
1 Other		
2 Unknown		
3 Ounces		
4 Grams		
5 Fluid Ounce		
6 Milliliter		
7 Sheets		
8 Inches		
9 Millimeters		

PMI Enumerations - Device Types

Input Type
1 Other
2 Unknown
3 Sheet-feed-auto-removable-tray
4 sheet-feed-auto-non removable tray
5 Sheet Feed Manual
6 continuous-roll
7 continuous-fan-fold

Output Type
1 Other
2 Unknown
3 Removable Bin
4 UnRemovable Bin
5 Continuous Roll Device
6 Mail Box

Media Path Type
1 Other
2 Unknown
3 Long Edge Binding Duplex
4 Short Edge Binding Duplex

Finisher Type
1 Other
2 Unknown
3 Stitching
4 Binding
5 Trimming
6 Die-cutting
7 Punching
8 Perforating
9 Slitting
10 Inserting
11 Covers
12 Folding

Channel Type
1. Other
2. Unknown
3. Serial Port
4. Parallel Port
5. IEEE1284 Port
6. SCSI Port
7. Apple PAP
8. LPD Server
9. Novell RPrinter
10. Novell Pserver
11. port 9100
12. FTP/TFTP
13. Adobe AppSocket (9101)
14. DLC/LLC Port
15. Coax
16. Twinax
17. Fax
18. IEEE 1394

Marker Supply Class
1 Other
2 Unknown
3 Supply that is consumed
4 Receptacle that is filled

Marking Technology
1 Other
2 Unknown
3 Electophotographic:LED
4 Electrophotographic:Laser
5 Electrophotographic:Other
6 Impact:Moving_Head:Dot_Matrix:9pin
7 Impact:Moving_Head:Dot_Matrix:24pin
8 Impact:Moving_Head:Dot_Matrix:other
9 Impact:Moving_Head:Fully_Formed
10 Impact:band
11 Impact:other
12 Inkjet:Aqueous
13 Inkjet:Solid
14 Inkjet:Other
15 Pen
16 Thermal:Transfer
17 Thermal:Sensitive
18 Thermal:Diffusion
19 Thermal:Other
20 Electroerosion
21 Electrostatic
22 Photographic:Microfiche
23 Photographic:Imagesetter
24 Photographic:Other
25 Ion-deposition
26 E-beam
27 Typesetter

Marker Supply Type
1 Other
2 Unknown
3 Toner
4 Waste Toner
5 Ink
6 Ink Cartridge
7 Ink Ribbon
8 Waste Ink
9 OPC (Organic Photo Contuctor)
10 Developer
11 Fuser Oil

Interpreter Language Family
1 Other
2 Unknown
3 PCL
4 HPGL
5 PJL
6 PostScript
7 IPDS
8 PPDS
9 EscapeP
10 Epson
11 DDIF
12 Interpress
13 ISO6429
14 LinePrinter
15 MODCA
16 ReGIS
17 SCS
18 SPDL
19 Tek4014
20 PDS
21 IGP
22 Code-V
23 DSC-DSE
24 WPS
25 LN03
26 CCITT
27 QUIC
28 CPAP
29 DEC-PPL
30 SimpleText

SkinStatus
1 Other
2 Unknown
3 Door Open
4 Door Closed
5 Interlock Open
6 Interlock Closed

PMI Enumerations - Misc

Media Orientation	**Media Color**	**Line Status**
1 Other	1 Other	1 Other
2 Unknown	2 Unknown	2 Unknown
3 Portrait	3 White	3 On Line
4 Reverse Portrait	4 Pink	4 Pending On Line
5 Landscape	5 Yellow	5 Off Line
6 Reverse Landscape	6 Buff	6 Pending Off Line
	7 Goldenrod	
	8 Blue	
	9 Green	
	10 Transparent	
Named Finshing	**ColorantValue - String**	**Light Color**
1 Other	ASCII representation of the integer asociated with the folloing names.	1. Other
2 Unknown	1. Other	2. Unknown
3 Staple	2. Unknown	3. White
4 Staple Top Left	3. White	4. Red
5 Staple Bottom Left	4. Red	5. Green
6 Stable Top Right	5. Green	6. Blue
7 Staple Bottom Right	6. Blue	7. Cyan
8 Saddle Stitch	7. Cyan	8. Magenta
9 Edge Stitch	8. Magenta	9. Yellow
10 Punch	9. Yellow	10. Black
11 Cover	10. Black	
12 Bind	Additional names using ISO9070 naming convention.	
YesNo -OnOff	**ResetType**	**ColorantRole**
1. Other	1. Other	1. Other
2. Unknown	2. Unknown	2. Unknown
3. Yes - On	3. Reset NVRAM	3. Process
4. No - Off	4. Reset to Factory Defaults	4. Spot
Inform Class	**Channel Active**	**StackingOrder**
1 Other	1. Other	1. Other
2 Unknown	2. Unknown	2. Unknown
3 Untrained	3. Only Print Data Accepted	3. Face-Up
4 Trained	4. Only Control Data Accepted	4. Face-Down
5 Field Serve	5. Print and Control Data Accepted	
6 Management	6. No Data Accepted	

PMI Enumerations - Misc

Media Size

1	other	
2	unknown	
3	na-letter	-- North American letter size: 8.5 by 11 inches
4	na-legal	-- North American legal size: 8.5 by 14 inches
5	na-10x13-envelope	-- North American 10x13 size: 10 by 13 inches
6	na-9x12-envelope	-- North American 9x12 size: 9 by 12 inches
7	na-number-10-envelope	-- North American number 10 business envelope
8	na-7x9-envelope	-- North American 7x9 size: 7 by 9 inches
9	na-9x11-envelope	-- North American 9x11 size: 9 by 11 inches
10	na-10x14-envelope	-- North American 10x14 size: 10 by 14 inches
11	na-number-9-envelope	-- North American number 9 business envelope
12	na-6x9-envelope	-- North American 6x9 size: 6 by 9 inches
13	na-10x15-envelope	-- North American 10x15 size: 10 by 15 inches
14	a	-- engineering A size
15	b	-- engineering B size
16	c	-- engineering C size
17	d	-- engineering D size
18	e	-- engineering E size
23	iso-a0	-- ISO A0 size: 841 mm by 1189 mm
24	iso-a1	-- ISO A1 size: 594 mm by 841 mm
25	iso-a2	-- ISO A2 size: 420 mm by 594 mm
26	iso-a3	-- ISO A3 size: 297 mm by 420 mm
27	iso-a4	-- ISO A4 size: 210 mm by 297 mm
28	iso-a5	-- ISO A5 size: 148 mm by 210 mm
29	iso-a6	-- ISO A6 size: 105 mm by 148 mm
30	iso-a7	-- ISO A7 size: 74 mm by 105 mm
31	iso-a8	-- ISO A8 size: 52 mm by 74 mm
32	iso-a9	-- ISO A9 size: 37 mm by 52 mm
33	iso-a10	-- ISO A10 size: 26 mm by 37 mm
43	iso-b0	-- ISO B0 size: 1000 mm by 1414 mm
44	iso-b1	-- ISO B1 size: 707 mm by 1000 mm
45	iso-b2	-- ISO B2 size: 500 mm by 707 mm
46	iso-b3	-- ISO B3 size: 353 mm by 500 mm
47	iso-b4	-- ISO B4 size: 250 mm by 353 mm
48	iso-b5	-- ISO B5 size: 176 mm by 250 mm
49	iso-b6	-- ISO B6 size: 125 mm by 176 mm
50	iso-b7	-- ISO B7 size: 88 mm by 125 mm
51	iso-b8	-- ISO B8 size: 62 mm by 88 mm
52	iso-b9	-- ISO B9 size: 44 mm by 62 mm
53	iso-b10	-- ISO B10 size: 31 mm by 44 mm
66	iso-c3	-- ISO C3 size: 229 mm by 324 mm
67	iso-c4	-- ISO C4 size: 229 mm by 324 mm
68	iso-c5	-- ISO C5 size: 162 mm by 229 mm
69	iso-c6	-- ISO C6 size: 162 mm by 229 mm
70	iso-designated	-- ISO Designated Long size: 110 mm by 220 mm
83	jis-b0	-- JIS B0 size
84	jis-b1	-- JIS B1 size
85	jis-b2	-- JIS B2 size
86	jis-b3	-- JIS B3 size
87	jis-b4	-- JIS B4 size
88	jis-b5	-- JIS B5 size
89	jis-b6	-- JIS B6 size
90	jis-b7	-- JIS B7 size
91	jis-b8	-- JIS B8 size
92	jis-b9	-- JIS B9 size
93	jis-b10	-- JIS B10 size

PMI Enumerations - Alert Codes

Severity Level Alert Code	Alert Class Code	Alert Group Code
1 Other	1 Other	1 Other
2 Unknown	2 Unknown	2 Unknown
3 Critical	3 Management	3 Input
4 Warning	4 Technical	4 Output
	5 Operator	5 Finisher
		6 Media Path
		7 General Printer
		8 Marker
		9 System Controller
		10 Interface
		11 Interpreter
		12 Operator Console

Input Alert Code	Output Alert Code	Marker Alert Code
1 Other	1 Other	1 Other
2 Unknown	2 Unknown	2 Unknown
3 Cover Open	3 Cover Open	3 Cover Open
4 Cover Closed	4 Cover Closed	4 Cover Closed
5 Interlock Open	5 Interlock Open	5 Interlock Open
6 Interlock Closed	6 Interlock Closed	6 Interlock Closed
7 Configuration Change	7 Configuration Change	7 Configuration Change
8 Jam	8 Jam	8 Jam
9 Media Tray Missing	9 Media Tray Missing	9 Toner Empty
10 Media Size Change	10 Media Tray Almost Full	10 Ink Empty
11 Media Weight Change	11 Media Tray Full	11 Print Ribbon Empty
12 Media Type Change		12 Toner Almost Empty
13 Media Color Change		13 Ink Almost Empty
14 Media Form Parts Change		14 Print Ribbon Almost Empty
15 Media Supply Low		15 Waste Toner Receptical Almost Full
16 Media Supply Empty		16 Waste Ink Receptical Almost Full
		17 Waste Toner Receptical Full
		18 Waste Ink Receptical Full
		19 Fuser Under Temperature
		20 Fuser Over Temperature
		21 OPC LIfe Almost Over
		22 OPC Life Over
		23 Developer Almost Empty
		24 Developer Empty

General Printer Alert Code	Media Path Device Alert Code	Finisher Alert Code
1 Other	1 Other	1 Other
2 Unknown	2 Unknown	2 Unknown
3 Cover Open	3 Cover Open	3 Cover Open
4 Cover Closed	4 Cover Closed	4 Cover Closed
5 Interlock Open	5 Interlock Open	5 Interlock Open
6 Interlock Closed	6 Interlock Closed	6 Interlock Closed
7 Door Open	7 Configuration Change	7 Configuration Change
8 Door Closed	8 Jam	8 Jam
	9 Media Tray Missing	9 Media Tray Missing
	10 Media Tray Almost Full	10 Supply Empty
	11 Media Tray Full	11 Supply Low
		12 Receptical Almost Full
		13 Receptical Full

Interpreter Alert Code	Interface Alert Code	
1 Other	1 Other	
2 Unknown	2 Unknown	
3 Configuration Change	3 Configuration Change	
4 Memory Increase		
5 Memory Decrease		
6 Cartridge Added		
7 Cartridge Deleted		
8 Resource Added		
9 Resource Deleted		
10 Resource Unavailable		