



# Open Printing Requirements

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## Abstract

The Free Standards Group (FSG) Open Printing Requirements provides the list of derived and implied architectural, system and subsystem requirements. This document defines the use-cases and behind-the-scene functionality leading to the requirements.

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**1. Introduction < ??? >**

## 2. Terminology and Acronyms <all>

### 2.1 Conformance Terminology < All >

In this document, the uppercase terms “MUST”, “MUST NOT”, “REQUIRED”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” are intended to be interpreted as described in [RFC2119]

In this document, each conformance statement uses one of the terms:

<i>Term</i>	<i>Meaning</i>
<b>MUST</b>	Implementation support is <b>REQUIRED</b> for conformance to this specification.
<b>SHOULD</b>	Implementation support is <b>RECOMMENDED</b> for conformance to this specification.
<b>MAY</b>	Implementation support is <b>OPTIONAL</b> for conformance to this specification.

In this document, each operation, object, or attribute is defined as:

<i>Term</i>	<i>Meaning</i>
<b>REQUIRED</b>	Each implementation <b>MUST</b> support object operations or attributes.
<b>RECOMMENDED</b>	Each implementation <b>SHOULD</b> support object operations for interoperability
<b>OPTIONAL</b>	Each implementation <b>MAY</b> support object operations or attributes .

### 2.2 Other Terminology <all>

<i>Term</i>	<i>Meaning</i>

**2.3 Acronyms < All >**

<i>Acronyms</i>	<i>Meaning</i>	<i>Source</i>
<b>PWG</b>	<b>Printer Working Group</b>	<a href="http://www.pwg.org/">http://www.pwg.org/</a>
<b>FSG</b>	Free Standards Group	
<b>FSG/OP</b>	Free Standards Group – Open Printing	<a href="http://www.openprinting.org/">http://www.openprinting.org/</a>

### 3. Open Printing Use Models (Informative) < ??? >

#### 3.1 Use Model 1: Mobile Printing < Ira >

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < ... >
3. < ... >



### 3.2 Use Model 2: PDA Printing < Ira >

< one sentence description of use model >

#### *Example Use Model:*

< one or two paragraphs illustrative use model example >

*Behind the Scenes:* < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

#### *Exceptions for Use Model:*

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

#### *Use Model Diagram:*

#### *Requirements for this Use Model:*

1. < enumerated list of the requirements for this use model >
2. < . . . >
3. < . . . >

### 3.3 Use Model 3: Desktop Personal (Consumer) Printing < Mark >

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < ... >
3. < ... >

### 3.4 Use Model 4: Desktop Small-Office/Home-Office Printing < Norm >

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < . . . >
3. < . . . >

### 3.5 Use Model 5: Desktop Office Printing < Till >

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < . . . >
3. < . . . >

### 3.6 Use Model 6: Central (Print Room) Office Printing < Glen >

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < ... >
3. < ... >

### 3.7 Use Model 7: Desktop File (Direct) Printing < Glen >

[Note: Print to print service directly from file manager versus going through application]

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < ... >
3. < ... >

### 3.8 Use Model 8: Pay for Print Printing < Mark/Claudia >

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < . . . >
3. < . . . >

### **3.9 Use Model 8: Print on Demand < Claudia >**

< one sentence description of use model >

#### ***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

#### ***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*

\*

\*

< exception n for this use model >

#### ***Use Model Diagram:***

#### ***Requirements for this Use Model:***

4. < enumerated list of the requirements for this use model >

5. < . . . >

6. < . . . >



### **3.10 Use Model 9: Production (Transactional, Statements) Printing < Tom/Ira >**

[Note: may have two use models: one for in-house and service bureau ]

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*  
\*  
\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < ... >
3. < ... >

### **3.11 Use Model 10: Graphics Art (non-offset) Printing < TBD >**

< one sentence description of use model >

***Example Use Model:***

< one or two paragraphs illustrative use model example >

***Behind the Scenes:*** < What is happening behind the scene for this use model >

< numbered list of flow in Use Model Diagram >

***Exceptions for Use Model:***

[[ Editor Note: How do we handle exceptions to the use model ]]

< exception 1 for this use model >

\*

\*

\*

< exception n for this use model >

***Use Model Diagram:***

***Requirements for this Use Model:***

1. < enumerated list of the requirements for this use model >
2. < ... >
3. < ... >

#### 4. Open Printing Requirements < ??? >

This section describes the general requirements of the Open Printing solution. These requirements will be based on the use models defined above along with the issues of Discovery, Print Job Control Security and Billing.

[[ Editor Note: This should a table with major headings (category) (driver, job ticket, etc) and the requirements listed.

<i>Category</i>	<i>No.</i>	<i>Requirement</i>	<i>Required Recommended Optional</i>
Job Ticket	R1000		Required

## **5. Other Considerations**

### **5.1 ???? < ??? >**

## 6. Normative References

[ISO639] multi-part International Standard, presently consisting of [ISO639-1] and [ISO639-2].

[ISO639-1] Codes for the Representation of Names of Languages -- Part 1: Alpha-2 Code, ISO/IEC 639-1, 2000.

[ISO639-2] Codes for the Representation of Names of Languages -- Part 2: Alpha-3 Code, ISO/IEC 639-2, 1998.

[ISO3166] multi-part International Standard, presently consisting of [ISO3166-1] and [ISO3166-2].

[ISO3166-1] Codes for the Representation of Names of Countries and their Subdivisions, Part 1: Country Codes, ISO/IEC 3166-1, 1997.

[ISO3166-2] Codes for the Representation of Names of Countries and their Subdivisions, Part 2: Country Subdivision Codes, ISO/IEC 3166-2, 1998.

[ISO10646] multi-part International Standard, presently consisting of [ISO10646-1] and [ISO10646-2].

[ISO10646-1] Information Technology - Universal Multiple-Octet Code Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane, ISO/IEC 10646-1, September 2000.

[ISO10646-2] Information Technology - Universal Multiple-Octet Code Character Set (UCS) - Part 2: Supplemental Planes, ISO/IEC 10646-2, January 2001.

[RFC2119] Bradner. Key words for use in RFCs to Indicate Requirement Levels, RFC 2119, March 1997.

[RFC2396] Berners-Lee, Fielding, Masinter. URI Generic Syntax, RFC 2396, August 1998.

[RFC2910] Herriot, R., Butler, S., Moore, P., Turner, R., "Internet Printing Protocol/1.1: Encoding and Transport", RFC 2910, September 2000.

[RFC2911] R. deBry, T. Hastings, R. Herriot, S. Isaacson, P. Powell, “ Internet Printing Protocol/1.10: Model and Semantics”, RFC 2911, September 2000.

[RFC2978] Freed, Postel. IANA Charset Registration Procedures, RFC 2978, October 2000.

[RFC3066] Alvestrand. Tags for the Identification of Languages, RFC 3066, January 2001.

## 7. Informative References

- [cip4] The International Cooperation for the Integration of Processes in Prepress, Press and Postpress (CIP4) located at <http://www.cip4.org/>
- [jdf] The Job Definition Format (JDF), version 1.1, August 2002. Set the Document tab at: <http://www.cip4.org>
- [pwg] The Printer Working Group located at <http://www.pwg.org/>
- [pwg-sm] Zehler, P., Hastings, T., and Albright, S., Printer Working Group (PWG): Semantic Model, March 26, 2003, work in progress at <ftp://ftp.pwg.org/pub/Semantic-Model/wd-sm010-20030326.pdf>
- [IANA-CHAR] IANA Registry of Character Sets [ftp://ftp.iana.org/assignments/charset-reg/...](ftp://ftp.iana.org/assignments/charset-reg/)
- [IANA-MIME] IANA Registry of MIME Media Types [ftp://ftp.iana.org/assignments/media-types/...](ftp://ftp.iana.org/assignments/media-types/)
- [RFC2277] Alvestrand. IETF Policy on Character Sets and Languages, RFC 2277, January 1998.
- [RFC2279] Yergeau. UTF-8, a Transformation Format of ISO 10646, RFC 2279, January 1998.

**APPENDIX: X CHANGES < Editor >**

<i>Date</i>	<i>Affected Version</i>	<i>Author</i>	<i>Change</i>
08.14.03	-----	G. Petrie	Original document
08.21.03	0.01	G. Petrie	Removed the Generalized Use Model section. Renamed several of the Use Models. Added Print on Demand Use Model.

# End of Document