Title of Document  
(Acronym)

Status: Initial

Abstract: This white paper proposes something really interesting. Provide an abstract for your white paper here.

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Title: *Title of Document (Acronym)*

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1. Introduction

Provide an introduction for the document.

Figure 1 - An Example Figure

Table 1 - An Example Table

|  |  |  |
| --- | --- | --- |
| Keyword | Description | Conformance |
| One | The first keyword | REQUIRED |
| Two | The second keyword | OPTIONAL |

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 [BCP14]. This specification defines the following additional capitalized conformance terms:

*CONDITIONALLY REQUIRED*: A MUST conformance requirement that applies only when a specified condition is true.

*DEPRECATED*: A SHOULD NOT conformance requirement for previously defined and approved protocol elements that are planned to be removed from use.

*OBSOLETE*: A MUST NOT conformance requirement for previously defined and approved protocol elements that have been removed from use.

* 1. Printing Terminology

The following printing terms are used in this document:

*Administrator*: An End User who is also authorized to manage all aspects of an Output Device or Printer, including creating the Printer instances and controlling the authorization of other End Users and Operators [RFC2567].

*Document*: An object created and managed by a Printer that contains the description, processing, and status information. A Document object may have attached data and is bound to a single Job [PWG5100.5].

*End User*: An End User is a person or software process that is authorized to perform basic printing functions, including finding/locating a Printer, creating a local instance of a Printer, viewing Printer status, viewing Printer capabilities, submitting a Print Job, viewing Print Job status, and altering the attributes of a Print Job [RFC2567].

*Impression*: An Impression is the content imposed upon one side of a Media Sheet by a marking engine, independent of the number of times that the sheet side passes any marker. An Impression contains one or more Input Pages that are imposed (scaled, translated, and/or rotated) during processing of the Document data [STD92].

*Input Page*: An Input Page is a page according to the definition of "pages" in the language used to express the Document data [STD92].

*Job*: An object created and managed by a Printer that contains description, processing, and status information. The Job also contains zero or more Document objects [STD92].

*Job Creation Operation*: A Job Creation operation is any operation that causes the creation of a Job object, e.g., the Create-Job, Print-Job, and Print-URI operations defined in this document [STD92].

*Logical Device*: a print server, software service, or gateway that processes jobs and either forwards or stores the processed Job or uses one or more Physical Devices to render output [STD92].

*Media Sheet*: A Media Sheet is a single instance of a medium, whether printing on one or both sides of the medium. Media Sheets also include sections of roll media [STD92].

*Operator*: An Operator is an End User that also has special rights on the Output Device or Printer. The Operator typically monitors the status of the Printer and also manages and controls the Jobs at the Output Device [RFC2567]. The Operator is allowed to query and control the Printer, Jobs, and Documents based on site policy.

*Output Device*: a single Logical or Physical Device [STD92].

*Physical Device*: a hardware implementation of an endpoint device, e.g., a marking engine, a fax modem, etc. [STD92]

*Set*: A Set is a logical boundary between the delivered Media Sheets of a printed Job. For example, in the case of a ten-page single Document with collated pages and a request for 50 copies, each of the 50 printed copies of the Document constitutes a Set. If the pages were uncollated, then 50 copies of each of the individual pages within the Document would represent each Set. Finishing processes operate on Sets [STD92].

*Terminating State*: The final state for a Job or other object is called its Terminating State. For example, the 'aborted', 'canceled', and 'completed' Job states are Terminating States [STD92].

* 1. Protocol Role Terminology

The following protocol roles are defined to specify unambiguous conformance requirements:

*Client*: Initiator of outgoing connections and sender of outgoing operation requests (Hypertext Transfer Protocol -- HTTP/1.1 [STD99] User Agent) [STD92].

*Printer*: Listener for incoming connections and receiver of incoming operation requests (Hypertext Transfer Protocol -- HTTP/1.1 [STD99] Server) that represents one or more Physical Devices or a Logical Device [STD92].

* 1. Other Terminology

This specification defines the following terms:

*Capitalized Term In Italics*: definition of the term with any references as appropriate.

* 1. Acronyms and Organizations

This specification defines the following acronyms and organizations:

*IANA*: Internet Assigned Numbers Authority, <https://www.iana.org/>

*IETF*: Internet Engineering Task Force, <https://www.ietf.org/>

*ISO*: International Organization for Standardization, <https://www.iso.org/>

*PWG*: Printer Working Group, <https://www.pwg.org/>

1. Rationale

Provide a rationale for the white paper.

* 1. Use Cases

Provide use cases for the white paper in subsections using the casual use case format.

* 1. Exceptions

The following subsections define exceptions in addition to those defined in the Internet Printing Protocol/1.1 [STD92].

Provide exceptions to the use cases using the casual use case format.

* 1. Out of Scope

The following are considered out of scope for this white paper:

1. Definition of foo
2. Protocols for bar
3. Requirements for bla
   1. Design Requirements

The design requirements for this white paper are:

1. Define attributes for foo and bar
2. Define operations for bla

The design recommendations for this white paper are:

1. Support additional "nice to have" use cases
2. Technical Solutions/Approaches

Provide possible technical solutions/approaches in this section. Include pros and cons for each technical solution or approach. Include references to specific protocols and/or data models when appropriate. Include mapping and gateway considerations when appropriate.

1. Internationalization Considerations

*Note: The following boilerplate text may not be sufficient for all purposes. In a standards-track working draft we include conformance requirements (see the wd-template file for details).*

For interoperability and basic support for multiple languages, conforming implementations 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).

1. Security and Privacy Considerations

Provide security and privacy considerations for this white paper.

1. References

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[RFC2567] F.D. Wright, "Design Goals for an Internet Printing Protocol", RFC 2567, April 1999, <https://datatracker.ietf.org/doc/html/rfc2567>

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[UAX15] M. Davis, M. Duerst, "Unicode Normalization Forms", Unicode Standard Annex 15, August 2021, <https://www.unicode.org/reports/tr15>

[UNICODE] Unicode Consortium, "Unicode Standard", Version 14.0.0, September 2021, <https://www.unicode.org/versions/Unicode14.0.0/>

[REFERENCE] F. Last author list or standards body, "Title of referenced document", Document Number, Month YYYY, URL (if any)

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The authors would also like to thank the following individuals for their contributions to this white paper:

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Zapp Brannigan - Democratic Order of Planets

1. Change History

This section will be removed when this document is published.

* 1. Month, DD, YYYY

Initial revision.