Network Working Group
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Portable Font Resource (PFR) - application/font-tdpfr MIME Sub-type Registration

Status of this Memo

Copyright Notice

Abstract

This document describes the registration of the Multipurpose Internet Mail Extensions (MIME) sub-type application/font-tdpfr. The encoding is defined by the PFR Specification.

A Portable Font Resource (PFR) contains a set of glyph shapes. Each glyph shape is associated with a character code. The PFR format is designed to be both compact and platform-independent. It is intended to facilitate accurate rendering of fonts in all environments whether or not they have the required fonts already installed.

1. Conventions used in this document

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC-2119 [REQ].

2. Overview

This document describes the registration of the MIME sub-type application/font-tdpfr. The encoding is defined by [PFR].

3. PFR Definition

PFR (Portable Font Resource) is defined by Bitstream Inc. in [PFR]. The documentation can be obtained from Bitstream at:

Bitstream Inc.
215 First Street
Cambridge MA 02142 U.S.A.
Phone: +1 617 497 6222
Fax: +1 617 868 0784

A copy of this specification can also be found at:

http://www.bitstream.com/pfrspec/index.html

While a brief scope and feature description is provided in this section as background information, the reader is directed to the original PFR specification [PFR] to obtain complete feature and technical details.

3.1 PFR Scope

A PFR contains a set of glyph shapes. Each glyph shape is associated with a character code. The PFR format is designed to be both compact and platform-independent. It is intended to facilitate accurate rendering of fonts in environments whether or not they have the required fonts already installed.

The glyph shape definitions in a PFR are resolution-independent. This allows glyph definitions to be displayed or printed on devices with a wide variety of resolutions. It also allows glyphs to be rendered at any size.

3.2 PFR Features

Some of the features of the PFR format are:

- Compact representation of glyph shapes
- Independent of byte order and operating system
- Independent of output device resolution
- Fully scalable to any glyph size
- Optional inclusion of bitmap glyph images
- Adopted as the font standard by DAVIC, DVB, and DTG

4. Comments

This document is submitted by J. Collins, Bitstream Inc. All comments should be directed to <jcollins@bitstream.com>.

5. MIME Definition

The PFR media type has been previously registered with IANA as application/vnd.truedoc. In view of its subsequent widespread adoption as a standard font format by multiple standards bodies who have relationships with the Internet community, Bitstream has been asked to re-register this media type within the IETF tree.

6. IANA Registration

To: ietf-types@iana.org
Subject: Registration of Standard MIME Media type
application/font-tdpfr

MIME media type name: application

MIME subtype name: font-tdpfr

Required parameters: none

Optional parameters: none

Encoding considerations: Binary or base 64 required

Security considerations:

PFR uses a structure that can store glyph image data and encoding arrays. The fields defined in the PFR specification are of a descriptive nature and provide information that is useful to facilitate viewing and rendering of glyph images by a recipient. As such, the fields currently defined in the PFR specification do not in themselves create additional security risks, since the fields are not used to induce any particular behavior by the recipient application.

PFR has an extensible structure, so that it is theoretically possible that fields could be defined in the future which could be used to induce particular actions on the part of the recipient, thus presenting additional security risks, but this type of capability is not supported in the referenced PFR specification. Indeed, the definition of fields that would include such processing instructions is inconsistent with the goals and spirit of the PFR specification.

Interoperability considerations: none

Published specification:

The specification for this content type is available on request from:

Bitstream Inc.
215 First Street
Cambridge MA 02142 U.S.A.
Phone: +1 617 497 6222
Fax: +1 617 868 0784

A copy of this specification can also be found at:

http://www.bitstream.com/pfrspec/index.html

Applications which use this media type:

Netscape Communicator, Bitstream WebFont Maker, Hexmac Typograph

Additional information: None

Magic number(s): 50 46 52 30 hex

File extension(s): PFR

Macintosh File Type Code(s): Creator: ’b$pw’ Type: ’PFR ’

Person to contact for further information:

"John Collins" <jcollins@bitstream.com>

Intended usage: common

Author/Change controller:

"John Collins" <jcollins@bitstream.com>

7. References

[REQ] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

[MIME1] Freed, N. and N. Borenstein, "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", RFC 2045, November 1996.

[MIME4] Freed, N. and N. Borenstein, "Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures", RFC 2048, November 1996.

[PFR] Bitstream Inc. "PFR Specification", http://www.bitstream.com/pfrspec/index.html

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9. Full Copyright Statement

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