The application/firmware, application/firmware-receipt, and
application/firmware-error media types
draft-turner-application-firmware-media-types-00.txt

Abstract

   This document registers the application/firmware,
   application/firmware-receipt and application/firmware-error media
   media types for use with the corresponding CMS (Cryptographic Message
   Syntax) content types defined in RFC 4108.

1. Introduction

[RFC4108] defined three CMS (Cryptographic Message Syntax) [RFC5652]
content types for servers to distribute Firmware packages as well as
clients to return receipts and errors.   Three media types are
defined in this document to support the transfer of firmware
packages, firmware package receipts, and firmware package errors.

Firmware packages, firmware package receipts, and firmware package
errors are always encapsulated within ContentInfo structures
[RFC4108]. Firmware packages are additionally encapsulated within a
SignedData structure [RFC4108]. Firmware package receipts and errors
can be digitally signed and to indicate this option an optional
parameters is defined: protection=signed.

1.1. Requirements Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT",
"SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this
document are to be interpreted as described in [RFC2119].

2. Media Type Registration Applications

2.1. Firmware Package Receipt

This section provides the media type registration application for the
application/firmware-receipt media type (see [RFC6838], Section 5.6).

   Type name: application

   Subtype name: firmware

   Required parameters: None

   Optional parameters: None

   Encoding considerations: binary.

   Security considerations: See [RFC4108].

   Interoperability considerations: See [RFC4108].

   Published specification: RFC 4108 and this specification.

   Applications which use this media type:

      Applications that support Firmware Package Receipts [RFC4108].

Additional information:

  Magic number(s): None
  File extension(s): .fp
  Macintosh File Type Code(s):

Person & email address to contact for further information:

  Sean Turner <turners@ieca.com>

Restrictions on usage: none

Author: Sean Turner <turners@ieca.com>

Intended usage: COMMON

Change controller: The IESG

2.2. Firmware Package Receipt

This section provides the media type registration application for
the application/firmware-receipt media type (see [RFC6838], Section
5.6).

Type name: application

Subtype name: firmware-receipt

Required parameters: None

Optional parameters:

  Implementations can indicate whether the firmware package was
  signed with the following parameter: protection=signed.

Encoding considerations: binary.

Security considerations: See [RFC4108].

Interoperability considerations: See [RFC4108].

Published specification: RFC 4108 and this specification.

Applications which use this media type:

  Applications that support Firmware Package Receipts [RFC4108].

   Additional information:

      Magic number(s): None
      File extension(s): .fpr
      Macintosh File Type Code(s):

   Person & email address to contact for further information:

      Sean Turner <turners@ieca.com>

   Restrictions on usage: none

   Author: Sean Turner <turners@ieca.com>

   Intended usage: COMMON

   Change controller: The IESG

2.3. Firmware Package Errors

   This section provides the media type registration application for
   this media type (see [RFC6838], Section 5.6).

   Type name: application

   Subtype name: firmware-error

   Required parameters: None

   Optional parameters:

      Implementations can indicate whether the firmware package was
      signed with the following optional parameter: protection=signed.

   Encoding considerations: binary.

   Security considerations: See [RFC4108].

   Interoperability considerations: See [RFC4108].

   Published specification: RFC 4108 and this specification.

   Applications which use this media type:

      Applications that support Firmware Key Package Errors [RFC4108].

   Additional information:

      Magic number(s): None
      File extension(s): .fpe
      Macintosh File Type Code(s):

   Person & email address to contact for further information:

      Sean Turner <turners@ieca.com>

   Restrictions on usage: none

   Author: Sean Turner <turners@ieca.com>

   Intended usage: COMMON

   Change controller: The IESG <iesg@ietf.org>

3. IANA Considerations

   IANA is asked to register the media type application/firmware,
   application/firmware-receipt, and application/firmware-error in the
   Standards tree using the applications provided in Section 2.1-2.3 of
   this document.

4. Security Considerations

   No new security considerations are introduced in additional those
   specified in [RFC4108].

5. References

5.1. Normative References

   [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate
              Requirement Levels", BCP 14, RFC 2119, March 1997.

   [RFC4108] Housley, R., "Using Cryptographic Message Syntax (CMS) to
              Protect Firmware Packages", RFC 4108, August 2005.

   [RFC5652] Housley, R., "Cryptographic Message Syntax (CMS)", STD 70,
              RFC 5652, September 2009.

5.2. Informative References

   None.

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