                The application/whoispp-response Content-type

Status of this Memo

   This memo provides information for the Internet community. It does
   not specify an Internet standard of any kind. Distribution of this
   memo is unlimited.

Abstract

   This document defines the expression of Whois++ protocol (RFC1835)
   responses within MIME (Multipurpose Internet Mail Extensions)
   (RFC2046) media types. The intention of this document, in
   conjunction with RFC 2957 is to enable MIME-enabled mail software,
   and other systems using Internet media types, to carry out Whois++
   transactions.

1. MIME Registration Information

   To: iana@isi.edu Subject: Registration of MIME media type
   application/whoispp-response

   MIME Type name: Application

   MIME subtype name: whoispp-response

   Required parameters: none

   Optional parameters: none

   Encoding considerations: Any valid MIME encodings may be used

   Security considerations: This content-type contains purely
   descriptive information (i.e., no directives). There are security
   considerations with regards to the appropriateness (privacy) of

information provided through the use of this content-type, and the
authenticity of the information so-provided. This content-type
provides no native mechanisms for authentication.

Published specification: this document

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Intended usage: common

2. whoispp-response Syntax

The following grammar, which uses ABNF-like notation as defined in
[RFC2234], defines a subset of responses expected from a Whois++
server upon receipt of a valid Whois++ query. As such, it describes
the expected structure of a whoispp-response media type object.

N.B.: As outlined in the ABNF definition, rule names and string
literals are in the US-ASCII character set, and are case-insensitive.

```
    server          =    goodmessage mnl output mnl endmessage nl
                         / badmessage nl endmessage nl

    output          =    full / abridged / summary / handle

    full            =    0*(full-record / server-to-ask)

    abridged        =    0*(abridged-record / server-to-ask)

    summary         =    summary-record

    handle          =    0*(handle-record / server-to-ask)

    full-record     =    "# FULL " template serverhandle localhandle
                               system-nl
                         1*(fulldata system-nl)
                         "# END" system-nl

    abridged-record =    "# ABRIDGED " template serverhandle localhandle
                            system-nl
                         abridgeddata
                         "# END" system-nl
```

```
      summary-record  =   "# SUMMARY " serverhandle system-nl
                           summarydata
                           "# END" system-nl

      handle-record   =   "# HANDLE " template serverhandle localhandle
                                   system-nl

      server-to-ask   =   "# SERVER-TO-ASK " serverhandle system-nl
                           server-to-askdata
                           "# END" system-nl

      fulldata        =   " " attributename ": " attributevalue

      abridgeddata    =   " " 0*( attributevalue / tab )

      summarydata     =   " Matches: " number system-nl
                          [" Referrals: " number system-nl]
                          " Templates: " template 0*( system-nl "-"
                                                 template)

      server-to-ask-data = " Server-Handle:" serverhandle system-nl
                          " Host-Name: " hostname system-nl
                          " Host-Port: " number system-nl
                          [" Protocol: " prot system-nl]
                          0*(" " labelstring ": " labelstring system-nl)

      attributename   =   1*attrbyte

      attrbyte        =   <%d33-127 except specialbyte>

      attributevalue  =   longstring

      template        =   labelstring

      serverhandle    =   labelstring

      localhandle     =   labelstring

      hostname        =   labelstring

      prot            =   labelstring

      longstring      =   bytestring 0*( nl ( "+" / "-" ) bytestring )

      bytestring      =   0*charbyte

      labelstring     =   0*restrictedbyte
```

```
      restrictedbyte  =   <%d32-%d255 except specialbyte>

      charbyte        =   <%d32-%d255 except nl>

      specialbyte     =   ":" / " " / tab / nl

      tab             =   %d09

      mnl             =   1*system-nl

      system-nl       =   nl [ 1*(message nl) ]

      nl              =   %d13 %d10

      message         =   [1*( messagestart "-" bytestring nl)]
                          messagestart " " bytestring nl

      messagestart    =   "% " digit digit digit

      goodmessage     =   [1*( goodmessagestart "-" bytestring nl)]
                          goodmessagestart " " bytestring nl

      goodmessagestart=   "% 200"

      messagestart    =   "% " digit digit digit

      badmessage      =   [1*( badmessagestart "-" bytestring nl)]
                          badmessagestart " " bytestring nl

      badmessagestart =   "% 5" digit digit

      endmessage      =   endmessageclose

      endmessageclose =   [endmessagestart " " bytestring nl]
                          byemessage

      endmessagestart =   "% 226"

      byemessage      =   byemessagestart " " bytestring nl

      endmessagestart =   "% 203"

      number          =   1*( digit )

      digit           =   "0" / "1" / "2" / "3" / "4" / "5" / "6" / "7"
                          / "8" / "9"
```

3. Security Considerations

    Security issues are discussed in section 1.

4. References

    [ALVE95]   Alvestrand H., "Tags for the Identification of Languages",
               RFC 1766, March 1995.

    [RFC2234] Crocker, D. and P. Overell, "Augmented BNF for Syntax
               Specifications: ABNF", RFC 2234, November 1997.

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               Content-Type", RFC 2957, October 2000.

    [RFC1835] Deutsch, P., Schoultz R., Faltstrom P. and C. Weider,
               "Architecture of the WHOIS++ service", RFC 1835, August
               1995.

    [HARR85]   Harrenstein, K., Stahl, M. and E. Feinler, "NICNAME/WHOIS",
               RFC 954, October 1985.

    [POST82]   Postel J., "Simple Mail Transfer Protocol", STD 10, RFC
               821, August 1982.

    [IIIR]   Weider C. and P. Deutsch, "A Vision of an Integrated
               Internet Information Service", RFC 1727, December 1994.

    [WINDX]   Weider, C., Fullton J. and S. Spero, "Architecture of the
               Whois++ Index Service", RFC 1913, February 1996.

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Acknowledgement