

RFC # 561
NIC # 18516

Abhay Bhushan (AKB) MIT-DMCG
Ken Pogran (KP) MIT-MULTICS
Ray Tomlinson (RST) BBN-TENEX
Jim White (JEW) SRI-ARC
5 September 73

Standardizing Network Mail Headers

One of the deficiencies of the current FTP mail protocol is that it makes no provision for the explicit specification of such header information as author, title, and date. Many systems send that information, but each in a different format. One fairly serious result of this lack of standardization is that it's next to impossible for a system or user program to intelligently process incoming mail.

Although the long-term solution to the problem is probably to add commands for specifying such information to the mail protocol command space (as suggested in RFC 524 -- 17140,), we hereby propose a more quickly implemented solution for the interim.

We suggest that the text of network mail, whether transmitted over the FTP telnet connection (via the MAIL command) or over a separate data connection (with the MLFL command), be governed by the syntax below:

Example:

```
From: White at SRI-ARC
Date: 24 JUL 1973 1527-PDT
Subject: Multi-Site Journal Meeting Announcement
NIC: 17996
```

At 10 AM Wednesday 25-JULY there will be a meeting to discuss a Multi-Site Journal in the context of the Utility. Y'all be here.

Formal Syntax:

```
<mailtext>      ::= <header> <CRLF> <message>
<header>        ::= <headeritem> ! <headeritem> <header>
<headeritem>    ::= <item> <CRLF>
<item>          ::= <authoritem> ! <dateitem> !
                  <subjectitem> ! <miscitem>
```

```

<authoritem> ::= FROM: <SP> <user> <SP> AT <SP> <host>
<dateitem>   ::= DATE: <SP> <date> <SP> <time> - <zone>
<subjectitem> ::= SUBJECT: <SP> <line>
<miscitem>   ::= <keyword> : <SP> <line>
<date>       ::= <vdate> ! <tdate>
<vdate>      ::= <dayofmonth> <SP> <vmonth> <SP> <vyear>

<tdate>       ::= <tmonth> / <dayofmonth> / <tyear>
<dayofmonth> ::= one or two decimal digits
<vmonth>      ::= JAN ! FEB ! MAR ! APR ! MAY ! JUN !
                  JUL ! AUG ! SEP ! OCT ! NOV ! DEC
<tmonth>      ::= one or two decimal digits
<vyear>       ::= four decimal digits
<tyear>       ::= two decimal digits
<zone>        ::= EST ! EDT ! CST ! CDT ! MST ! MDT !
                  PST ! PDT ! GMT ! GDT
<time>        ::= four decimal digits
<user>        ::= <word>
<host>        ::= a standard host name
<message>     ::= <line> <CRLF> ! <line> <CRLF> <message>

<keyword>     ::= <word>
<line>        ::= a string containing any of the 128 ASCII
                  characters except CR and LF
<word>        ::= a string containing any of the 128 ASCII
                  characters except CR, LF, and SP
<CRLF>        ::= CR LF
<SP>         ::= space

```

Please note the following:

- (1) <authoritem>, <dateitem>, and <subjectitem> may each appear at most once in <header>; <miscitem> may occur any number of times. The order of <authoritem>, <dateitem>, and <subjectitem> is insignificant, but they must proceed all occurrences of <miscitem>.
- (2) The case (upper or lower) of keywords -- specifically, 'FROM', 'DATE', 'SUBJECT', 'AT', <host>, <zone>, <vmonth> and <keyword> -- is insignificant. Although 'FROM', for example, appears in upper-case in the formal syntax above, in the header of an actual message it may appear as 'From' (as in the example), or 'from', or 'FrOm', etc.
- (3) No attempt has been made to legislate the format of <user>, except to exclude spaces from it.
- (4) The time has no internal punctuation.
- (5) No provision is made for multiple authors.

We recommend that mail-sending subsystems which prefix header information to the text of the user's message be modified

appropriately, and that other hosts recommend the above conventions to their users.

