NAME/FINGER

Introduction

This note describes the Name/Finger protocol. This is a simple protocol which provides an interface to the Name and Finger programs at several network sites. These programs return a friendly, human-oriented status report on either the system at the moment or a particular person in depth. Currently only the SAIL (SU-AI), SRI (SRI-(KA/KL)), and ITS (MIT-(AI/ML/MC/DMS)) sites support this protocol, but there are other systems with similar programs that could easily be made servers; there is no required format and the protocol consists mostly of specifying a single "command line".

To use via the network:

ICP to socket 117 (octal, 79. decimal) and establish two 8-bit connections.

Send a single "command line", ending with \textless CRLF\textgreater.

Receive information which will vary depending on the above line and the particular system. The server closes its connections as soon as this output is finished.

The command line:

Systems may differ in their interpretations of this line. However, the basic scheme is straightforward: if the line is null (i.e. just a \textless CRLF\textgreater is sent) then the server should return a "default" report which lists all people using the system at that moment. If on the other hand a user name is specified (e.g. FOO\textless CRLF\textgreater) then the response should concern only that particular user, whether logged in or not.

Both ITS and SAIL sites allow several names to be included on the
line, separated by commas; but the syntax for some servers can be slightly more elaborate. For example, if "/W" (called the "Whois switch") also appears on the line given to an ITS server, much fuller descriptions are returned. The complete documentation may be found at any time in the files ".INFO.;NAME ORDER" on MIT-AI, "FINGER.LES[UP,DOC]" on SU-AI, and "<DOCUMENTATION>FINGER.DOC" on

SRI-KL, all freely accessible by FTP (with the exception of SRI-KL, where TOPS-20 requires the "anonymous" login convention).

Allowable "names" in the command line should of course include "user names" or "login names" as defined by the system, but it is also reasonable to understand last names or even full names as well. If a name is ambiguous, all possible derivations should be returned in some fashion; SAIL will simply list the possible names and no more, whereas an ITS server will furnish the full standard information for each possibility.

Response to null command line - "default" listing:

This is a request for a list of all online users, much like a TOPS-10 or TENEX "systat". To fulfill the basic intent of the Name/Finger programs, the returned list should include at least the full names of each user and the physical locations of their terminals insofar as they can be determined. Including the job name and idle time (number of minutes since last typein, or since last job activity) is also reasonable and useful. The appendix has examples which demonstrate how this information can be formatted.

Response to non-null command line - "name" listing:

For in-depth status of a specified user, there are two main cases. If the user is logged in, a line or two is returned in the same format as that for the "default" listing, but showing only that user. If not logged in, things become more interesting. Furnishing the
full name and time of last logout is the expected thing to do, but there is also a "plan" feature, wherein a user may leave a short message that will be included in the response to such requests. This is easily implemented by (for example) having the program look for a specially named text file on the user's directory or some common area. See the examples for typical "plans".

Implementation miscellany:

Anyone wishing to implement such a server is encouraged to get in touch with the maintainers of NAME by sending a message to BUG-NAME @ MIT-AI; apart from offering advice and help, a list of all sites with such servers is kept there. It is also suggested that any existing programs performing similar functions locally (i.e. not as net servers) be extended to allow specification of other sites, or names at other sites. For example, on ITS systems one can say ":NAME<cr>" for a local default listing, or ":NAME @SAIL<cr>" for SAIL's default listing, or ":NAME Foo@MC<cr>" to ask MIT-MC about Foo's status, etc.

It should be noted that connecting directly to the server from a TIP or an equally narrow-minded TELNET-protocol user program can result in meaningless attempts at option negotiation being sent to the server, which will foul up the command line interpretation unless the server knows enough to filter out IAC's and perhaps even respond negatively (IAC WON'T) to all option commands received. This is a convenience but is not at all required, since normally the user side is just an extended NAME/FINGER type program.

And finally a little background:

The FINGER program at SAIL, written by Les Earnest, was the inspiration for the NAME program on ITS. Earl Killian at MIT and Brian Harvey at SAIL were jointly responsible for implementing the protocol just described, and Greg Hinchliffe has recently brought up
a similar server for SRI-KA and SRI-KL.
Note: it is possible for some lines of the actual output to exceed 80 chars in length. The handling of such lines is of course dependant on the particular user program; in these examples, lines have been truncated to 72 chars for greater clarity.

Three examples with a null command line:

Site: MIT-AI
Command line:

-User- --Full name-- Jobnam Idle TTY -Console location-
XGP O Xerox Graphics Printer XGPSPL T24 Datapoint Near XGP (9TH)
FFM U Steven J. Kudlak HACTRN T41 Net site CMU-10A
KLH + Ken Harrenstien F T42 Net site SRI-KL
___013 - Not Logged In HACTRN 1:26.T43 DSSR UNIX x3-6048 (MIT-*)
CWH U Carl W. Hoffman E 4.T50 919 Very Small Data Bas*
CARL A Carl Hewitt HACTRN 5:03.T52 813 Hewitt x5873
APD M Alexander Doohovskoy XGP 1:52.T54 912 9th Floor Lounge x6*
JJK T James Koschella E T55 824 Hollerbach, Levin, *
KEN L Kenneth Kahn E T56 925 Moon (Tycho under) *

Site: SAIL
Command line:

<table>
<thead>
<tr>
<th>Person</th>
<th>Job Jobnam Idle</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAN Dan Sleator</td>
<td>46 MACLSP</td>
<td>DM-3</td>
</tr>
<tr>
<td>DEK Don Knuth</td>
<td>3 E</td>
<td>3. tv-55 205 Library</td>
</tr>
<tr>
<td>PI</td>
<td>2 TV-55 205 Library</td>
<td></td>
</tr>
<tr>
<td>ES Gene Salamin</td>
<td>44 SD MC</td>
<td>TV-40 223a Farmwald</td>
</tr>
<tr>
<td>JJ Jerrold Ginsparg</td>
<td>11 TELNET</td>
<td>DM-0 150/1200 modem 415 49*</td>
</tr>
<tr>
<td>JMC John McCarthy</td>
<td>1 FINGER</td>
<td>detached</td>
</tr>
<tr>
<td>KRD Randy Davis</td>
<td>42 AID</td>
<td>7 TV-52 203 Allen</td>
</tr>
<tr>
<td>LES Les Earnest</td>
<td>23 TEMPS</td>
<td>2. DM-1 150/1200 modem 415 49*</td>
</tr>
<tr>
<td>ME Martin Frost</td>
<td>17 E</td>
<td>3 tv-46 220 Filman, Frost</td>
</tr>
<tr>
<td>31 E</td>
<td>TV-46 220 Filman, Frost</td>
<td></td>
</tr>
<tr>
<td>PAM Paul Martin</td>
<td>9 E</td>
<td>TV-106 251C King, Levy, Martin</td>
</tr>
<tr>
<td>ROD Rod Brooks</td>
<td>37 MACLSP</td>
<td>3 TV-117 250C</td>
</tr>
<tr>
<td>RWG Bill Gosper</td>
<td>30 SD MC</td>
<td>TV-34 230e Robinson</td>
</tr>
<tr>
<td>RWW Richard Weyhrauch</td>
<td>39 E</td>
<td>TV-42 214 Weyhrauch</td>
</tr>
<tr>
<td>SYS system files</td>
<td>6 FINGER</td>
<td>PTY122 5 Arpanet site AI*</td>
</tr>
</tbody>
</table>
Appendix - Examples

Site: SRI-KL
Command line:

Drum   0%  Load avs 0.26 0.23 0.31  14 Act, 10 Idle,  8 Det

<table>
<thead>
<tr>
<th>User</th>
<th>Personal Name</th>
<th>Job Subsys</th>
<th>TTY</th>
<th>Room</th>
<th>Console Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLEAN</td>
<td>Bob Blean</td>
<td>EXEC</td>
<td>41</td>
<td>K2007</td>
<td>Blean</td>
</tr>
<tr>
<td>KLH</td>
<td>Ken Harrenstien</td>
<td>TELNET</td>
<td>12</td>
<td>J2023</td>
<td>Spaceport</td>
</tr>
<tr>
<td>KREMMERS</td>
<td>Jan Kremers</td>
<td>TECO</td>
<td>121</td>
<td>Dialup</td>
<td>326-7005 (300 Ba*)</td>
</tr>
<tr>
<td>MAINT</td>
<td>Digital Equipment</td>
<td>SNDMSG</td>
<td>43</td>
<td>K2035</td>
<td>Melling</td>
</tr>
<tr>
<td>MCCLURG</td>
<td>Jim McClurg</td>
<td>EXEC</td>
<td>26</td>
<td>PKT</td>
<td></td>
</tr>
<tr>
<td>MMCM</td>
<td>Michael McMahon</td>
<td>EXEC</td>
<td>122</td>
<td>Dialup</td>
<td>326-7006 (300 Ba*)</td>
</tr>
<tr>
<td>MOORE</td>
<td>J Moore</td>
<td>TV</td>
<td>124</td>
<td>Dialup</td>
<td>326-7008 (300 Ba*)</td>
</tr>
<tr>
<td>PATTIS</td>
<td>Richard Pattis</td>
<td>LISP</td>
<td>11</td>
<td>ARC</td>
<td></td>
</tr>
<tr>
<td>PETERSO</td>
<td>Norman Peterson</td>
<td>EXEC</td>
<td>234</td>
<td>(RAND-TIP)</td>
<td></td>
</tr>
<tr>
<td>STONE</td>
<td>Duane Stone</td>
<td>TELNET</td>
<td>240</td>
<td>(RADC-TIP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EXEC</td>
<td>232</td>
<td>(SRI-KL)</td>
<td></td>
</tr>
<tr>
<td>TORRES</td>
<td>Israel Torres</td>
<td>BSYS</td>
<td>76</td>
<td>K2079</td>
<td>TI by tape drives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EXEC</td>
<td>104</td>
<td>K2029</td>
<td>Operators' Office</td>
</tr>
</tbody>
</table>
Examples with names specified:

Site: MIT-AI
Command line: klh

KLH   + Ken Harrenstien   Last logout 10/16/77 13:02:11  No plan.

Site: MIT-MC
Command line: cbf

CBF   M Charles Frankston   Not logged in. Plan:
I'll be visiting another planet til about December 15. If anyone
wants to get a hold of me transmit on some fundamental wavelength
(like the radius of the hydrogen atom).

Site: MIT-MC
Command line: smith
Site: SU-AI
Command line: smith

"SMITH" is ambiguous:
RS Bob Smith
DAV Dave Smith
JOS Julius Smith
LCS Leland Smith

Site: SU-AI
Command line: jbr

Person Job Jobnam Idle Line Room Location
JBR Jeff Rubin 16 COPY 27. TV-43 222 Rubin
          TV-104 233 hand-eye table

Site: SU-AI
Command line: bh

    Person     Last logout
BH  Brian Harvey  22:49 on 14 Dec 1977.  Plan:
    ^O08-Oct-77  2156  BH  ^Y12257 (1-Jul-78)
Weekdays during the day I'm usually unreachable; I'm either at S.F. State or at Benjamin Franklin JHS in San Francisco, but neither place is recommended for leaving messages. Evenings and weekends I'm generally home (55) 751-1762 unless I'm at SAIL. I log in daily from home.

Site: SRI-KL
Command line: greg

GREG (Greg Hinchliffe) is on the system:

    Job Subsys  # Siz  Runtime  1m%  15m%  TTY  Room  Console Location
62 EXEC     1  0  0:00:10.6    0.8  235     (SUMEX-AIM)

Last login: Mon 12-Dec-77, 15:05, from SUMEX-AIM (Host #56.)
GREG has no new mail, last read on Mon 12-Dec-77 15:10