

NWG/RFC# 742
Network Working Group
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NIC: 42758

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SRI-KL
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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 <CRLF>.

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 <CRLF> 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. F00<CRLF>) 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.

EXAMPLES

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	0 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:

Person	Job	Jobnam	Idle	Terminal	
DAN Dan Sleator	46	MACLSP		DM-3	150/1200 modem 415 49*
DEK Don Knuth	3	E	3.	tv-55	205 Library
	20	PI	2	TV-55	205 Library
ES Gene Salamin	44	SD MC		TV-40	223a Farmwald
JJ Jerrold Ginsparg	11	TELNET		DM-0	150/1200 modem 415 49*
JMC John McCarthy	1	FINGER	.	detached	
	12	E	2.	IML-15	McCarthy's house
KRD Randy Davis	42	AID	7	TV-52	203 Allen
LES Les Earnest	23	TEMPS	2.	DM-1	150/1200 modem 415 49*
ME Martin Frost	17	E	3	tv-46	220 Filman, Frost
	31	E		TV-46	220 Filman, Frost
PAM Paul Martin	9	E		TV-106	251C King, Levy, Martin
ROD Rod Brooks	37	MACLSP	3	TV-117	250C
RWG Bill Gosper	30	SD MC		TV-34	230e Robinson
				TV-67	213 Kant, McCune, Steinbe*
RWW Richard Weyhrauch	39	E		TV-42	214 Weyhrauch
SYS system files	6	FINGER		PTY122	job 5 Arpanet site AI*

Site: SRI-KL
Command line:

Thursday, 15-Dec-77 01:21:24-PST System up 3 Days, 22:20:52 28 Jobs
Drum 0% Load avs 0.26 0.23 0.31 14 Act, 10 Idle, 8 Det

User	Personal Name	Job	Subsys	15m%	TTY	Room	Console Location
BLEAN	Bob Blean	37	EXEC	0.0	41	K2007	Blean
KLH	Ken Harrenstien	83	TELNET	1.6	12	J2023	Spaceport
KREMERS	Jan Kremers	48	TECO	0.0	121	Dialup	326-7005 (300 Ba*
MAINT	Digital Equipment	54	SNDSMSG	0.5	43	K2035	Melling
MCCLURG	Jim McClurg	40	EXEC	0.0	26	PKT	
MMCM	Michael McMahon	31	EXEC	1.5	122	Dialup	326-7006 (300 Ba*
MOORE	J Moore	52	TV	0.2	124	Dialup	326-7008 (300 Ba*
PATTIS	Richard Pattis	19	LISP	0.8	11	ARC	
PETERSO	Norman Peterson	33	EXEC	25:12	234		(RAND-TIP)
STONE	Duane Stone	34	TELNET	3:51	240		(RADC-TIP)
		27	EXEC	7:11	232		(SRI-KL)
TORRES	Israel Torres	64	BSYS	0.0	76	K2079	TI by tape drives
		68	EXEC	1:15	104	K2029	Operators' Office

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

BRIAN	A Brian C. Smith	Last logout 11/24/77 08:02:24	No plan.
DBS	T David B. Smith	Last logout 12/03/77 11:24:01	No plan.
BPS	T Byron Paul Smith	Not logged in.	No plan.
GRS	U Gary R. Smith	Last logout 12/12/77 18:43:19	No plan.
JOS	S Julius Orion III Smith	Last logout 11/29/77 06:18:18	No plan.
\$PETE	M PETER G. SMITH,	Not logged in.	No plan.
IAN	L Ian C. Smith	Not logged in.	No plan.
AJS	D Arnold J. Smith	Last logout 12/09/77 14:31:11	No plan.

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:
^008-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