

FCHK - Phone Check

A Telephone Database Utility for Opus BBS's

FCHK Version 1.00

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System Sales & Consulting  
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FidoNet Node 1:261/662, 1:1/300  
BBS\_NET 86:3010/1, Zone 86 Coordinator  
(301) 252-0717

## INTRODUCTION:

What is FCHK? FCHK, originally named FONECHEC, and renamed for easier packaging and distribution, is a user verification and authentication tool for Opus CBCS, and Opus-Style Bulletin Board Systems.

FCHK will request and maintain a user's telephone number, and use it as part of the login process (if you choose to implement it this way) as an additional safeguard that the user is genuine. In addition, when FCHK receives a telephone number for a particular user, it stores this number in a human-readable form (for later reference if needed) and can detect duplicate phone numbers in use between users.

## THEORY OF OPERATION:

Many of the bulletin board system programs in common use display new-user questionnaire files to users when they initially log on to the system. Some of these BBS programs have implemented an internal command language which is 'embedded' into the files displayed, instructing the BBS program to execute certain programs, or perform certain functions.

FCHK works in conjunction with these display files, and embedded commands in such a way, that a user's name and telephone number are first written to a file, and FCHK is executed. FCHK reads the user's name and telephone number from the file, processes the phone number for storage and matching, and checks the user's name and phone number against the database. On the first exposure to FCHK - that is, the first login after implementation, FCHK will simply request the user's phone number and store it, optionally detecting duplicate phone numbers in use.

If the duplicate phone log is specified, and if the user has specified a phone number already in use by other users in the FCHK database, a logfile record will be written showing the linkage and shared phone number.

On subsequent logins, the user must input the same telephone number he entered initially. If the phone numbers do not match, the specified 'bad' display file for mismatched users and user telephone numbers will be displayed. Embedded commands or other useful warnings, hangup commands, or otherwise might be contained in this file. If everything is ok with the name and password, the 'good' filename specified for this case is displayed, which might be the bulletins, or welcome screen, etc. for your particular system.

Whenever FCHK receives a telephone number for processing, it reduces the input until only the digits entered remain. For instance, if a user enters (301) 252-0717 as his telephone number (which incidentally is Avi-Technic BBS!), FCHK will store the number

'3012520717' for processing and matching. This allows proper processing of international and domestic telephone numbers.

Although not 'pretty', the numbers stored in the file FCHK.DAT are readable by humans. A caution however, as written, FCHK is sensitive to control-Z characters introduced by editors or other processes manipulating the FCHK.DAT file. If you do edit this file manually (i.e. perhaps a word-processor or a sorting program), be sure to run something like 'STRIP\_Z' or equivalent program to remove the

end-of-file (control-Z) characters from the file. User names are converted to UPPER CASE for ease of comparison and follow the telephone number strings, one number string, First and Last User Names per line.

Here is a sample segment of a FCHK.DAT file:

```
-----  
3012520717 TOM HENDRICKS  
123 GUEST VISITOR  
12345678901234567890123456789 LONGEST NUMBER  
-----
```

INSTALLING FCHK:

FCHK must be executed after a display file has opened a 'answers' file FCHK.USR and appropriate information posted to the file. The following sequence (illustrated in OECC command language), will demonstrate a sample display file to invoke FCHK:

```
-----  
[ckoff][moreoff]  
[cls][open]C:\OPUS\FCHK.USR  
[post]
```

In a further effort to enhance the features of this bulletin board system, users are requested to enter their home phone numbers as part of their login information.

It is strongly suggested that you use your home phone number, and that you remember to use the same number for each login.

If you are inadvertantly prevented from login because the number you have left doesn't match our records here, you may login as 'Guest Visitor' with the password 'Visitor' and the phone number of '123'. Please leave a comment to SYSOP describing the problem.

```
Please enter your telephone number: (areacode) ###-####  
>[readln]Phone  
[dos]C:\OPUS\FCHK C:\OPUS\MISC\GOOD C:\OPUS\MISC\BAD C:\OPUS\FCHK.LOG  
[display]C:\OPUS\FCHK  
-----
```

If invoked as part of a welcome.bbs (or similar file), FCHK

will appear as part of the login process. It is important that the last line displaying the file FCHK(.BBS) be included in the display file, as this line causes the display of either the 'good' file for successful matches, or the 'bad' file for mismatches. The 'good' file in this case might be the normal continuation of the system bulletins, or other display information.

#### THE 'BAD' FILE:

A sample display file for mismatches is shown below. Note the use of an additional [open] and [post] to provide a logfile of unsuccessful matches. This may prove useful in tracking bogus users attempting to login under another's identity.

```
-----  
[open]D:\OPUS\FCHK.LOG  
[post]
```

The telephone number you entered does not match our user records. This implies either there is an error in our records, or that you might be submitting fictitious telephone or user information.

If you are unable to login with the correct home phone and user name, you can login here under a guest account using the name: 'Guest Visitor', password 'Visitor' and Telephone number of '123'.

Once on as guest, leave a comment to the sysop with correct information, and he will contact you as appropriate to remedy the situation.

```
Please hang up now.  
[pause][pause][pause]  
<click>  
[hangup]
```

#### THE 'GOOD' FILE:

The display file can be anything you wish. I tend to follow with the output of a nice utility (ULDL) written by a local sysop, Tom Collins, which shows the relative uploads and downloads for the top number of users. Other implementations might point to their system bulletins, or even (wouldn't this be nice?) a short message saying that their name and phone number were just checked by FCHK, written by me!

#### THE 'LOG' FILE:

If you care to identify duplicate phone numbers shared by the users. Specify a third parameter on the FCHK command line, and when duplicates are identified, they will be written to the log file

specified. An example will appear below. Please note - when a user logs in thru FCHK multiple times, and he specifies a duplicate number, duplicate entries will be noted in the log file. You will get some idea on the frequency of logins via this mechanism as well. The key point however, is that FCHK will identify PAIRS of duplicate numbers. Always the caller, and any database entries stored prior to this user's entries with the same phone number as well.

```
-----  
HENRY SMITH <==> THOMAS HENDRICKS using: 3012520717  
HENRY SMITH <==> THOMAS HENDRICKS using: 3012520717  
HENRY SMITH <==> THOMAS HENDRICKS using: 3012520717  
TOM HENDRICKS <==> THOMAS HENDRICKS using: 3012520717  
-----
```

#### DISCLAIMER:

FCHK is (C) Copyright, 1988 by Thomas R. Hendricks, but may be freely distributed and used, so long as no fee is charged for its use.

FCHK was written in Turbo C (2.0), by Borland International (Trademark, Borland International) and no warranty of any kind is expressly given or implied. FCHK is provided "as is" for your use. In a nutshell, it was written and developed on an IBM AT, DataBank 286 and DataBank 386 machines, and performed flawlessly in testing. If it does not perform for you, please don't use it. In no way, will I accept any legal liability for its use.

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#### EDITORIAL:

FCHK is one of many programs and utilities released for general consumption. It is offered in the spirit of a cooperative attitude that we all must aspire to, in order to ensure the growth and harmony of our respective FidoNet-Technology Networks.

In speaking of FidoNet-Technology electronic mail networks, I would like to encourage all of you to inquire about BBS\_NET. Thru a twist in fate, I am currently the coordinator for BBS\_NET, which is just in the process of being formed and boasts networks thruout the US and Canada presently.

What BBS\_NET is attempting to do, is establish a smaller networking group of friendly people, prohibiting the bashing of other<tm> networks, like so many other alternate networks seem to be fond of doing. We're building on a democratic representative structure, incorporating elective components, built-in association, and judicial bodies.

At the present time a proposed By-Laws is in circulation, and the Council (our 'IFNA-BoD-Like' structure) is working on a constitution. Some of the people involved:

BBS\_NET Zone Coordinator: Tom Hendricks  
BBS\_NET Techno-Poobah: Vince Perriello  
BBS\_NET Council: Harry Lee, Andrew Farmer, Bill Kraski,  
George Emigh, (and some vacancies).  
BBS\_NET Echo Coordinator: Mike Talbert  
BBS\_NET Newsletter Editor: Amelia Hudson

If you're interested in BBS\_NET, ask one of these people, they'll be happy to help out. The Echo called "BBSNET" is available for BBS\_NET members, and is quite active. Other BBS\_NET echos are also available.

FCHK - QUESTIONS, COMMENTS or BUG REPORTS:

Should be forwarded to the author:

Thomas R. Hendricks  
c/o Avi-Technic BBS  
(301) 252-0717  
FidoNet Node 1:261/662, 1:1/300  
BBS\_NET 86:3010/1, and BBS\_NET Zone Coordinator

alternatively to:

Thomas R. Hendricks  
System Sales & Consulting, specializing in  
MicroComputer Consulting and Sales.  
P.O. Box 444  
Lutherville, MD 21093-0444

