

# FIXINI

**A utility for easily changing Windows settings  
without running Windows**

**Version 1.10  
(1995.01.05)**

© 1995 by Dave Grabowski, All Rights Reserved.  
Duplication for profit strictly prohibited.

## 1-Information

1. Introduction
2. Shareware Agreement and Registration
3. Background
4. System Requirements
5. Disclaimer
6. Contacting the Author
7. Credits and a Shameless Plug™

## 2-Usage

1. FIXINI.EXE
2. Contents of a Changefile
3. FIXINI in Your AUTOEXEC.BAT
4. Important Things to Know

## 3-Problems

1. Error Messages
2. Troubleshooting

## 4-Miscellany

1. Revision History

## **1.1 Introduction**

FIXINI is a simple yet powerful utility that will easily allow you to set up custom Microsoft Windows settings usually stored in .ini files without running windows. This can be extremely useful - multiple network setups, etc.

MS-DOS 6.0 gave us multiple boot configurations. This was certainly a fantastic idea, and FIXINI brings this same capability to Windows.

## **1.2 Shareware Agreement**

FIXINI is SHAREWARE. By using this software, you agree to the terms in this Shareware Agreement. You may use this program and evaluate it for thirty (30) days. After this time, you must either stop using this software and destroy any executable copies of it, or register it with the author.

Although FIXINI is shareware, the shareware version is not disabled in any way. The only difference between the shareware and registered versions is the nag-message and 5-second delay present only in the shareware version. Register FIXINI and no more nags.

Under no circumstances may anyone except the author receive payment for this software, except for usual on-line downloading charges or nominal copying fees.

### **REGISTRATION**

If you find FIXINI to be a useful utility, you should register it. Registration will entitle you to automatic \*FREE\* E-Mail updates as they are released (unless you prefer regular mail - but you must pay for postage), as well as the satisfaction in knowing that you've helped a poor college student pay for his continuing education (gee, that sounds really sappy.. I'm sorry..). Registration of FIXINI is only \$20.00 (US). Send your \$20.00 check, along with your name, postal address, E-Mail address, and telephone number to:

Dave Grabowski  
9 Sussex Ave  
Beautiful Downtown Newark, NJ 07103-3926

If you prefer FIXINI on a disk, include an extra \$5.00 to cover duplication and mailing. Please specify disk size and format.

## **1.3 Background**

Plain and simple, I wrote this program for myself. Recently, I got myself a subnotebook, and once I got a network card, I was using it very often to tie into clients' networks. It's much easier finding a little corner to sit in with my laptop to do some needed work than to try to kick a lawyer out of his plush leather chair so I can use his. However, I quickly ran into troubles. One client has Novell. Another has Windows for Workgroups. Another has WFW running on TOP of Novell. Still another is running LANtastic. How the heck am I supposed to get Windows to work with all of these?

Well, I could always go into Network Setup, change things around, and reboot. Every week, I would have to clean up my Windows directory and delete SYSTEM.125, WIN.384, etc., etc., etc. Sounds like a real pain in the butt.

Enter FIXINI. Now, starting with a base set of .INI files, I can make changes to my .INI files before Windows even starts. I select the type of network when I first boot my machine ala' MS-DOS Startup, and my AUTOEXEC.BAT runs FIXINI and sets up Windows for the right network.

FIXINI is written entirely in C, using Borland C++ 3.1. It is currently about 700 lines of code.

## **1.4 System Requirements**

If you have a PC that runs Windows, FIXINI should work.

FIXINI will use all available conventional memory that you give to it. The entire INI file is read into RAM, modified, and then written out. Unless you have a hideously large file, FIXINI should not run out of memory. The only real limitation beyond physical RAM is a maximum number of entries in a single [group] is around 2300. I can't see how this is possible.... :)

## **1.5 Disclaimer**

You use FIXINI at your own risk. Just because it works for me doesn't mean it will work for you. It's not my responsibility if your hard drive starts spinning *really* fast and flies out the window. Not that I've ever heard of that happening. At least not yet. BACKUP EVERYTHING. FIXINI, although shareware, will not self-destruct (at least it's not supposed to), but if it does and it takes a few of your precious files with it, tough. I know this doesn't sound very nice. I just don't want to end up in court because you had more faith in my program than I do.

I can't stress this enough: MAKE BACKUPS. BACKUP EVERYTHING. TWICE.

Windows is a trademark of Microsoft Corp.  
NetWare is a trademark of Novell Corp.  
LANtastic is a trademark of Artisoft, Inc.  
Borland C++ is a trademark of Borland International.

## **1.6 Contacting the Author**

If you have any questions or comments (please, no flames!) or need help with FIXINI, or (I hope this isn't true but...) you find bugs in FIXINI, I can be reached at the following E-Mail addresses:

dcg5662@hertz.njit.edu (checked almost daily)  
70721.2222@compuserve.com (checked when I get around to it)

When you send me E-Mail, ***YOU MUST*** specify which version, datecode, and build number FIXINI reports when it is executed.

## **1.7 Credits and a Shameless Plug™**

Thanks go out to my boss, Kevin Bross, who owns & operates Abacus Consulting (in northern NJ and NYC, computing solutions and systems integration - (201) 492-5953), who puts up with my crazy ideas and actually pays me for some of them.

Thanks also go out to everyone who gave me suggestions, and especially to the people who helped to test FIXINI (you know who you are).

## 2.1 Usage of FIXINI.EXE

FIXINI will do much of the dirty work for you, but before you can get it going, you have to create *CHANGEFILES*. Changefiles contain the necessary information required to set up Windows for a specific application of your choice.

Whenever FIXINI is executed, the called changefile is saved in `FIXINI.DAT` (located in the same directory as `FIXINI.EXE`). `FIXINI.DAT` is used when the `/U` switch is given to FIXINI.

FIXINI looks for the following command-line parameters:

```
FIXINI <filename> [options]
```

`<filename>` The name of the changefile you wish to execute. Extension should be `.CHG`.

`[options]` Any of the following:  
    `/D` (See section 3.2 for details on troubleshooting)  
    `/DD`  
    `/DDD`  
    `/U` Undo the last changefile saved in `FIXINI.DAT`.

The `/U` switch will undo the most recent changefile, as long as the unchangefile `<name>.UCH` exists in the same directory. Do not specify both a changefile name and the `/U` switch.

## 2.2 Contents of a changefile

Comments may be placed on lines *by themselves* as long as the first character in the line is a semicolon (;).

All commands must be in capital letters. Filenames are converted to uppercase. In general, new text will be added in the case that it is given, but text searches in the `.INI` file itself are performed without case sensitivity.

`BEGIN <filename>` - Specifies which file will be modified by the commands that follow. All commands up to the `END` line will be applied to this file. First, a temporary name `<file>.BAK` is generated in memory, and this file is deleted if it exists. The filename specified is then renamed to the temporary name. Then, it is opened for reading.

`END` - This on a line by itself tells FIXINI to stop processing the currently open file and dump it to disk.

`ENDFILE` - The last line of a changefile. If you get this far without any errors, you'll receive a message that your changes were successful.

`ADD [groupname]` - Adds the next line of text to a group `[groupname]`. If `[groupname]` does not yet exist in the current file, it will be created.

`DEL [groupname]` - Deletes the next line of text from group `[groupname]`. The wildcard character (``` - the backwards apostrophe) can be used on the text line to delete the first line in the group that contains the text.

`CHANGE [groupname]` - Changes the line in group `[groupname]`. The old text is on the next line of the command file, and the new text is on the following line. The wildcard character may be

used on the old text line.

```
DELGRP [groupname] - Deletes an entire group [groupname].
```

An example changefile to remove the instructions for how to exit a DOS prompt from DOS prompts:

```
BEGIN system.ini
ADD [386Enh]
DosPromptExitInstruc=False
END
ENDFILE
```

An example changefile to change your default printer:

```
BEGIN win.ini
CHANGE [windows]
device=
device=HP LaserJet Plus,HPPCL,LPT2:
END
ENDFILE
```

Included in the FIXINI.ZIP file are six changefiles that I use on my portable:

NON-WFW.CHG - Sets up Windows for Workgroups Network  
NON-WFW.UCH - Unchanges settings made with NON-WFW.CHG. Sets WFW for no network.  
NON-NOV.CHG - Sets up Windows to support Novell (4.X workstation shell - VLM.EXE)  
NON-NOV.UCH - Unchanges NON-NOV.CHG  
NON-NOVW.CHG - Sets up WFW to run on top of Novell  
NON-NOVW.UCH - Unchanges NON-NOVW.CHG

I realize that this documentation isn't very verbose, so if you are puzzled about something (particularly about the usage of the wildcard characters), check out the example files.

### **2.3 FIXINI in Your AUTOEXEC.BAT**

The easiest way to use FIXINI is to have it called in your AUTOEXEC.BAT. It is vital that you call it before you load your network drivers, or anything else that might reference the INI files that you plan to change.

Example: Suppose there are four different configurations, selectable from the MS-DOS 6 Startup menu, with the following changefiles:

<b><u>Config</u></b>	<b><u>Description</u></b>	<b><u>Changefile</u></b>	<b><u>UnChangefile</u></b>
nonet	No network support	n/a	n/a
wfw	Windows 4 Workgroups support (NDIS)	non-wfw.chg	non-wfw.uch
novell	Novell NetWare support (ODI)	non-nov.chg	non-nov.uch
novellwfw	Novell NetWare with WFW (ODI)	non-novw.chg	non-novw.uch

Note that there are no changefiles for the "nonet" configuration. This is because the "nonet" configuration is the *base* configuration. The other three configurations are based on the "nonet" configuration.

The beginning of AUTOEXEC.BAT looks something like this:

```
@echo off
fixini /u
```

The above line will undo the last changes that FIXINI made.

```
if %config%==wfw fixini c:\utils\non-wfw.chg
if %config%==novell fixini c:\utils-non-nov.chg
if %config%==novellwfw fixini c:\utils\non-novw.chg
```

The above lines will make the new changes to the .INI files.

```
if %config%==novell call c:\utils\nwclient\startnet.bat
if %config%==novellwfw call c:\utils\nwclient\startnet.bat
```

startnet.bat loads LSL, the ODI driver, IPXODI, and NETX.

```
if %config%==wfw c:\windows\net start
if %config%==novellwfw c:\windows\net start
```

The above lines start WFW network services.

```
if %config%==novell lh c:\windows\odihlp.exe
if %config%==novellwfw lh c:\windows\odihlp.exe
```

ODIHLP is required for Windows support of ODI drivers.

Note: If you use SMARTDRV (or some other disk-caching software), FIXINI's speed will increase if it is executed after the cache is enabled.

## **2.4 Important Things to Know**

FIXINI is not perfect. As FIXINI reads in your .INI files, it SKIPS any of the following (and they will not be written out to the new files):

- Blank lines (Note: a single blank line will be placed at the end of each [group])
- Comment lines (begin with a ';')
- Lines that start with a space
- Empty groups

If you have comments in your .INI files, you might want to back them up before you start toying with FIXINI.

If FIXINI encounters a text line that exists before a groupname begins (as in [thisgroup]), those lines will be placed in a group titled [nogroup]. This is due to the way FIXINI stores its data: The groups are stored as a linked list in order of occurrence, and each group points to a linked list of its entries.

### **3.1 Error Messages**

A comprehensive listing of all error messages FIXINI may generate:

Unable to open changefile.

The specified changefile, either on the command line or derived from FIXINI.DAT, could not be opened.

BEGIN command expected in changefile.

FIXINI was awaiting a BEGIN <filename> command but did not read it.

Unable to open backup file for read.

After renaming the .INI file to .BAK, the .BAK file could not be opened.

Unable to open new file.

After renaming the .INI file to .BAK, the new .INI file could not be open for writing.

File not found.

The file specified on the BEGIN line was not found.

Group not found.

A command specified to change or delete a group that does not exist.

Group already empty - unable to delete entry.

A command specified to delete an entry from an already empty group.

Entry not found in specified group.

A command specified to change or delete an entry in a group but the entry does not exist.

Undefined command.

The command line did not start with {ADD, CHANGE, DEL, DELGRP, END}

Unable to write to datafile.

Unable to write to FIXINI.DAT

Unable to read from datafile.

Unable to read FIXINI.DAT

No changes to undo.

The filename specified in FIXINI.DAT is already an unchangeable (\* .UCH)

Out of memory.

FIXINI ran out of available RAM. This really shouldn't occur.

Undefined error #<number>

This should NEVER happen. If it does, see section 1.6. :)

NOTE: Errors that occur when opening files may be the result of not enough files specified in CONFIG.SYS.

## **3.2 Troubleshooting**

Okay, you received error messages. They don't tell you very much. Rename the .BAK files that FIXINI saved for you to their original names and re-run FIXINI in debugging mode.

Debugging mode is invoked by placing the /D switch on the command line. You can select how deep you want to debug; each level will provide more output.

- /D - Debug Level 1 - Gives details on memory usage.  
Echoes every modification command from the changefile.
  
- /DD - Debug Level 2 - All features of level 1 plus:
  - Prints message when a group is created.
  - Prints message when an entry is added to a group.
  - Echoes BEGIN and END commands.
  - Prints file manipulation (erase, rename, open) messages.
  - Prints message when an entry is removed from a group.
  - Prints message when an entry is changed within a group.
  - Prints message when a group is deleted.
  
- /DDD - Debug Level 3 - All features of level 2 plus:
  - Prints out entire file after it is read, before it is modified.
  - Prints out entire file after it is modified, before it is written.
  - (Why you would want to use this is beyond me, but it's here because I needed it when I started working on FIXINI).

If you use /DD, or particularly if you use /DDD, you should redirect the output to either a file or a printer, because unless your machine is EXTREMELY slow, it's going to zip by way too fast for you to read it.

## **4.1 Revision History**

<u>Rev</u>	<u>Datecode/Build</u>	<u>Details</u>
1.00	1994.10.04	First working version
1.01	1994.10.05	Added Un-Fix flexibility with /U switch
1.02	1994.10.06	No actual changes; modified code for portability
1.03	1994.10.10	v1.02 didn't work at all. Oops.
1.04	1994.10.10	Fixed problem w/CHANGE for multiple entries in a group Format for CHANGE and DEL commands changed
1.05	1994.10.11	Added Out of Memory error, modified settings to handle memory better
1.10	1995.01.02	Added wildcard feature for CHANGE and DEL. Major overhaul of all code, making sure that far pointers are used for just about everything. Removed limitation of fixed string length, allowing better memory usage. Format for most commands changed.
1.10	1995.01.03 {02}	Minor changes and fixes. Small problems with memory usage. Added shareware nag. :)
1.10	1995.01.03 {03}	Optimized character I/O. Removed debug info from .EXE. .EXE is now only 20k.
1.10	1995.01.05 {04}	Increased stack size to 32k. Really big .INI's can now be processed.