

Transfer 95 Version 02.XX.XX

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All Specifications are subject to change without notice.

Note: The shareware version is limited to the use of the "Transfer Boot Code" and "Clone Drive" functions. The "Transfer Data" and "Transfer One Step" Functions are only available to registered users.

For all users of the shareware version, please see section 4.1H

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[Overview](#)

Transfer 95 is the answer to a simple question: "How do I move my Windows 95 operating system to my new larger hard drive." The old answer would be "Re-install Windows 95 and all of your applications onto the new drive."

This is a time consuming and frustrating job. If you have tried this you know what I mean. You will need your Windows 95 CD-ROM, CD-ROM DOS drivers, All of your software installation Diskettes/CD's, not to mention patches...updates...The list goes on.

Transfer 95 eliminates the frustration and time consumption of having to "Re-install Windows 95 (From the ground up)".

With Transfer 95 adding a new drive to your system involves just a few simple steps. You'll never have to worry about loosing any information. Transfer 95 copies all of your Desktop Preferences, Custom settings, And Applications. There's No information loss, No re-installation of Windows, in short using Transfer 95 is hassle free.

Transfer 95 main goal is to make the job of upgrading or backing your hard drive as easy and affordable as possible. The Personal Edition is targeted to the user looking to upgraded or backup within a standard desktop computer. If you need Network support, Drive Spanning, or CD-ROM writable images please see Transfer 95 Professional Edition.

[1.1 Registration](#)

This software is NOT 'freeware' if you want a registered version of this program, please view the instructions below. **(ALSO SEE ORDER.TXT & LICENSE.TXT)**

[1.2 The Registration Process](#)

This registration process be followed at all times.

- 1) Order the program using one of the methods outlined below.
- 2) We may require a billing confirmation in the case of a credit card order. In this case we will try to contact you by phone, if this is not possible we will email you a conformation request, or both.
- 3) We will send you a Registration Notification via email. This will contain further instructions on downloading the registered program.

[1.3 To Register on CompuServe](#)

GO SWREG and enter one of the following:

Personal Edition GO SWREG ID# 10473
Professional Edition GO SWREG ID# 13611

Personal Edition (Upgrade)GO SWREG ID# 14467
Professional Edition (Upgrade)GO SWREG ID# 14468

1.4 Credit Card Orders

You can your order using a credit card. We accept MasterCard, Visa, Amex, and Discover. To FAX in an order toll free call 888.396.6929 or 612.426.6023 with the completed ORDER.TXT form. 24 hours a day. Or you can email the form to itech@mn.uswest.net

1.5 To Order by Postal Mail

Fill out and mail **ORDER.TXT** that is supplied with this file.

Payment method: **(Email information is required)**

Money order: You will be notified upon receipt with registration confirmation information. Personal or Business check: You will be notified ten working days after receipt.

Note: No return postal orders are permitted. (SEE ORDER.TXT)

1.51 Pricing

Quantity	Personal Edition	Professional Edition	Professional Upgrade
1 - 4	\$20.00	\$50.00	\$30.00
5 - 9	\$17.00	\$38.00	\$21.00
10 - 15	\$15.00	\$33.00	\$18.00
16 +	\$14.00	\$31.00	\$17.00

Processing Fee/Upgrade - \$4.00 Plus \$1.00/Unit

Note: For upgrades you must purchase the same number of units as your original order.

1.6 Registration Notes

When you register, you will need to supply your name, exactly as you intend it to be input. ITS Systems reserves the right to make changes to the name as presented. **(See LICENSE.TXT & ORDER.TXT for LICENSE terms, and fee scale).**

1.7 Benefits Of Registration

As a registered user: (Providing shareware availability some benefits may be not applicable)

- 1). You will have full access to all of Transfer 95's features.
- 2). No more NAG screen, and your serial number will be recorded in the about box.
- 3). You will receive a pre-registered version of the latest software.
- 4). Email support will be provided. **(As described in LICENSE.TXT and below)NOTE: Please note phone support is provided on an in callbasis only. No out call support is available.**
- 5). You will be eligible for upgrades at the very reasonable prices
See: 1.51 Pricing

1.8 Obtaining Shareware Copies

The official distribution point on CompuServe is the Windows Shareware forum (GO WINSHARE). You can also receive support for Transfer 95 on this forum. The Windows Shareware forum is maintained by WUGNET.

The Windows Users Group Network [WUGNET], operators of the oldest and largest independent support resource forum [WINUSER] for Windows users on CIS with over 1,000,000 active members is recognized in the press, user groups, developers, and Microsoft as the foremost resource for shareware publishers on CompuServe and the Internet.

Also for the very latest information, please visit our home page on the Internet at: <http://www.itechsystems.com>

1.9 ***** Disclaimer *****

Please READ **LICENSE.TXT** which is distributed with this document.

1.9A Distribution Policy

All distributions of this software can only be made by ITS Systems and Michael J. Steiner. **(SEE LICENSE.TXT)** If you want to post this archive on a BBS or WEB site you will need written permission from ITS Systems first. **(See LICENSE.TXT for PENALTIES and FEES).**

2.0 Packing List (Personal Edition)

TRANSX95.EXE The executable program.
README.DOC This documentation file.
TRANSX95.T95 The help file.
LICENSE.TXT License agreement terms.
ORDER.TXT FAX, Email & Postal order form.
SORDER.TXT The site license order form.
VIEWER.EXE A text based viewer used by Transfer 95.
HELP.TXT The basic usage statement.
EXCLUDE.LST The exclusion list. This list may contain up to 100 entries. These are files that will not be copied during the transfer operation. (Directories cannot be excluded).

2.01 Packing List (Professional Edition)

TRANSX95.EXE The executable program.

README.DOC This documentation file.
 TRANSX95.T95 The help file.
 LICENSE.TXT License agreement terms.
 ORDER.TXT FAX, Email & Postal order form.
 SORDER.TXT The site license order form.
 VIEWER.EXE A text based viewer used by Transfer 95.
 HELP.TXT The basic usage statement.
 EXCLUDE.LST The exclusion list. This list may contain up to 100
 entries. These are files that will not be copied during the
 transfer operation. (Directories cannot be excluded).
 TCOPY32.EXE This is a command line version of Transfer 95.
 ICOPY32.EXE This program converts a drive into an image file.
 BUILD.TXT Contains information on compatible Windows 95 builds.
 EXTEXC.LST This is a list of extensions which will not be compressed
 by ICOPY32.
 IFSS.EXE This is the Installable Filing System Shell.
 IFSSINST.EXE Install program for IFSS.
 PROREAD.DOC Supplemental to this file. Examples of ICOPY use.

2.1 ***** Warning *****

Wherever performing operations below the level of the operating system, there are inherent dangers, i.e. causing damage to the system integrity, and programs contained there. Safeguards have been put in place to isolate the user from these dangers, although not all possibilities can be predicted. If you do not accept these inherent dangers, do not execute, or use this program. Please **DO NOT** for your own data safety **FORMAT, ERASE, SELL** or **DISCARD** your old hard drive until you are completely sure the new one is working to your satisfaction. If you are unfamiliar with terms used in this document, you maybe better off leaving this hard drive upgrade to your local computer store.

2.3 System Requirements

- 100% IBM compatible computer.
- 386 or above CPU.
- Windows 95 (All Builds).
- VGA monitor.
- 2MB of free hard drive space.
- 520KB of conventional memory free.
- 2MB Extended memory free.

3.0 Application Notes

The main goal of this program is to make available to the user an application which the Windows 95 operating system, can be copied from one hard drive, to another hard drive. And to provide support for standard, compressed, or drives using overlays. And that these drives can be of differing sizes. And make this copy such to including all pre-installed applications, and their associated settings, and user custom settings for the purpose of **upgrading to a larger hard drive, or backup of data to a separate medium.**

(Some parts of the preceding paragraphs may pertain to the Professional Edition and not the Personal Edition)

Please read this document completely before attempting any operation.

3.1 Control Line Arguments

+Cn Case state, used for debugging. n 1-10. Contact ITS Systems for a more detailed description.

+Rn Used to control the screen resolution. n=1-80x25,n=2-20x28 n=3-80x50

+VC Enable the internal video cache.

+MEM Conserve conventional memory where possible.

+SVn Use video interface. n=0-Default,n=1-Use TTY,n=2-Use BIOS.

+LB Use low intensity background colors.

+LF Use low intensity foreground colors.

-CPU Bypass the CPU detection and speed test.

-B Disable the Typematic error reporting mode.

-L Bypass the low conventional memory test.

-VSB1 Video set back switch, default is set back video, if this switch is used the video setup by the program remain in effect even after termination.

-Pn Set virtual memory type priority sequence n=1-XDL, n=2-XLD,n=3-DXL,n=4-DLX,n=5-LXD ,n=6-LDX. Where: X=Extended memory, D=Disk memory, L=Conventional memory.

-In Set virtual memory security level. n=0-LOW,n=1-HIGH.

-? /? Show help screen.

-A Update B/I to I with each video pass.

-NM Bypass mouse initialization, even if a mouse is present in the system. (Will not use the mouse).

+WBC Do not check for Windows 95 when doing Transfer Boot Code.

+BW Disables all color display. Use for Monochrome & LCD displays.

-HER Disable hardware error reporting (Default FAIL).

-RPT Disable the generation of a transfer error report file.

4.0 Window Title Bar Components

Located on the title bar you will find a few shortcut buttons. To activate these shortcut buttons you can either press their keyboard characters, or left click on them with the mouse. The first of these would be located in the upper left hand corner, and is the (-) symbol and when activated will show you the previous page. Next would be the (?) symbol and calls help for that window, then there is the '*' symbol which when activated puts that windows time out value on hold. And last is the 'X' symbol, which will allow you to close the program from where you are. A word about the time out value. The time out value is displayed along the lower right hand corner of the open window. This value has a preset of 60 seconds, if after 60 seconds if a button choice has not been made, then the default(Hilited) button will be automatically chosen.

4.1 The Main Menu

There are three main portions to this menu, first is the drive selection areas, second the function action buttons, and third the action button description area. Note: All functions are LFN aware. If

you are using the keyboard to access the function buttons, use ALT and the hi-lighted letter to access that function. NOTE: The main menu will time out after 30 minutes of inactivity, a tone will sound before exiting and you will be given 60 seconds to reactivate the program, if you do not and you are running Windows 95 you will be returned to Windows 95. If you are running from a DOS prompt the system will reboot.

4.1A The "Transfer Boot Code" Function

This function moves the Boot Code from the source drive to the destination drive. This function can also make the destination drive active, to keep drive swapping to a minimum, You must use this function from the DOS prompt(not a DOS box from Windows 95. Note: This function will reboot your computer after its completion. ***Drives connected to the secondary port of an IDE controller cannot have the boot code transferred to them. This may not be true for integrated PCI drive controllers.***

There has been some confusion as to the purpose of this function. This function has two goals. The first is to analyze both the source and destination drives Boot Code areas, and see what might need updating on the destination drives Boot Code area. Under some circumstances this may not be necessary, and when it is not necessary it will no be done. The second purpose is to set the destination drives primary partition to an active status, this is to keep drive swapping to a minimum.

4.1B Manual Boot Code Transfer(Creation)

This method would be used in several different cases. One if you need to use overlays on the destination drive, two if your using Transfer 95 Professional Edition with a network on a remote workstation, three if the destination drive needs to be place on the secondary port of the IDE controller. There are other times when this may be a necessary step also.

- 1). Create a Windows 95 startup disk.
- 2). Place the new hard drive in as the primary drive on the primary port.
- 3). Boot from the startup disk.
- 4). FDISK the new drive, if there is a partiton delete it and create a new one. At this time set the partition to ACTIVE.
- 5). Reboot from the startup disk.
- 6). FORMAT the new drive, then shut down the system.

At this point the drive is now ready to receive data. This new Boot Code that you have just created can only be removed by re-FDISKing the drive. FORMAT will not harm this new Boot Code area. So if need be you can re-format this drive without having to reset the partition status.

NOTE: If you were directed to this section when doing a Boot Code Transfer, then you would want to continue at this point to the Transfer Data function 'Refer to (Transfer procedure) step 4 of section 4.1D'

4.1C The "Transfer Data" or "Transfer One Step" Function

The "Transfer Data" function is used to transfer, or copy the contents of the source drive to the destination drive. More precisely stated, it rebuilds the destination drive from the ground up. This is accomplished through the use of high level<Low layer>(WIN95) functions. This function is best performed when running Windows 95 in the **SAFE MODE**, There are several files that will not be copied. These files are contained in the EXCLUDE.LST file.

If you plan on booting from this drive, make sure you do a "Transfer Boot Code" or Manual Boot Code Creation" section 4.1B procedure first. You will also need to change your CMOS settings and jumpers on the hard drive itself, Please refer to the respective manuals for instructions for each.

The "Transfer One Step" function is much like the "Transfer Data" function although it combines the "Transfer Boot Code" & "Transfer Data" functions into one. This is a time saver when you compare the procedures below.

When making changes to newer CMOS the option to have your drives on AUTO is sometimes available. We do not suggest you use the AUTO features when entering drive geometry. Instead enter the Cylinders, Heads, and Sectors Per Track in using the USER setting. Also we suggest using the LBA (Large Block Addressing) mode whenever possible. This would only be necessary for the target drive. If you receive many errors when doing a transfer, the most likely cause is a geometry problem with the target drive.

With the dropping hard drive prices, it is possible to buy a second hard drive just to make a copy of the main drive, as a backup...

Before doing the "Transfer Data" function, please run Norton Disk Doctor, or Scandisk, and completely defragment the source drive, with either Norton Utilities Speedisk for 95, or the Windows 95 program DEFRAG. Norton Speedisk is preferred, as Defrag does not completely defragment a drive. You will be notified if transfer errors occur. A REPORT file will be generated, and you will be notified if it is created after the transfer process has completed.

4.1D Adding A New Hard Drive, Standard Method

Please read through these directions before attempting the transfer. Do not read these directions while you are performing the transfer, if you do you may leave out procedures/steps that may need to be performed ahead of the transfer phase.

NOTE: In the following example, it is assumed that you are copying the contents of drive C: onto drive D: and that you will be making this new drive(D:) your bootable drive C:. Also it is assumed that the drive D: is a blank drive. Substitute drive letters as per your individual conditions.

Setup instructions

1). Configure the new C: drive as drive D: adjusting CMOS & jumper

settings.

- 2). Prepare new drive: Run: FDISK to setup the partition on drive D:
Primary *Not Active*) Reboot and run FORMAT D: /U (***No System Files***)
- 3). Make sure no Anti-Virus, Screen saver, programs are running. It may be necessary to un-install some anti-virus programs.
- 4). Make sure any APM (Advanced Power Management) enabled through CMOS or Software is disabled.

Transfer Procedure - Using "Transfer Data" function

- 1). Boot to a DOS prompt. (**Hit the F8 key when you see "Starting Windows 95", and choose option #5 <non-network> or #6 <network> "Command Prompt Only"**)
- 2). Run TRANSX95. Select drive C: as the source and drive D: as the destination.
- 3). Choose "Transfer Boot Code". **NOTE: if you will be booting from this drive make it active when prompted** (After this process the computer will reboot).
- 4). Boot into Windows 95. (**Safe Mode**) (**Hit the F8 key when you see "Starting Windows 95", and choose option #3 "Safe mode"**).
- 5). Shell to a DOS session(BOX). (**Start|Programs|MS-DOS Prompt**).
- 6). Run TRANSX95. Select drive C: as the source and drive D: as the destination.
- 7). Choose "Transfer Data"
- 8). "Exit" TRANSX95.
- 9). EXIT back into Windows 95. (**Type: EXIT at the DOS prompt**)
- 10). Shut down the system. (**Power Off**)

Transfer Procedure - Using "Transfer One Step" function

- 1). Boot into Windows 95. (**Safe Mode**) (**Hit the F8 key when you see "Starting Windows 95", and choose option #3 "Safe mode"**).
- 2). Shell to a DOS session(BOX). (**Start|Programs|MS-DOS Prompt**).
- 3). Run TRANSX95. Select drive C: as the source and drive D: as the destination.
- 4). Choose "Transfer One Step"
- 5). "Exit" TRANSX95.
- 6). EXIT back into Windows 95. (**Type: EXIT at the DOS prompt**)
- 7). Shut down the system. (**Power Off**)

Finishing Touches

- 1). Re-configure D: drive as the master drive, setting CMOS and jumper settings.
- 2). Boot to Windows 95 from the new drive.
- 3). Enable any previously disabled Anti-Virus, or Screen saver programs.
- 4). Enable any APM system disabled previously.

4.1E Adding A New Hard Drive, When The Source Drive Is Compressed (DS3) (Primary Method)

Please read through these directions before attempting the transfer. Do not read these directions while you are performing the transfer, if you do you may leave out procedures/steps that may need to be performed ahead of the transfer phase.

NOTE: In the following example, it is assumed that you are copying the contents of drive C: onto drive D: and that you will be making this new drive(D:) your bootable drive C:. Also it is assumed that the drive

D: is a blank drive. Substitute drive letters as per your individual conditions. It is also assumed the H: is the host drive for C:

Setup instructions

- 1). Configure the new C: drive as drive D: adjusting CMOS & jumper settings.
- 2). Prepare new drive: Run: FDISK to setup the partition on drive D: **Primary *Not Active*** Reboot and run **FORMAT D: /U (*No System Files*)**.
- 4). Make sure no Anti-Virus, Screen saver, programs are running.
- 5). Make sure any APM enabled through CMOS or Software is disabled.

Transfer Procedure

- 1). Boot to a DOS prompt. *(Hit the F8 key when you see "Starting Windows 95", and choose option #5 <non-network> or #6 <network> "Command Prompt Only")*.
- 2). Run TRANSX95. Select drive H: as the source and drive D: as the destination.
- 3). Choose "Transfer Boot Code". **NOTE: if you will be booting from this drive make it active when prompted** (After this process the computer will reboot).
- 4). Boot into Windows 95. **(Safe Mode)** *(Hit the F8 key when you see "Starting Windows 95", and choose option #3 "Safe mode")*.
- 5). Shell to a DOS session (BOX). *(Start|Programs|MS-DOS Prompt)*.
- 6). Run TRANSX95. Select drive C: as the source and drive D: as the destination.
- 7). Choose "Transfer Data"
- 8). "Exit" TRANSX95.
- 9). EXIT back into Windows 95. **(Type: EXIT at the DOS prompt)**
- 10). Shut down the system. **(Power Off)**

Finishing Touches

- 1). Re-configure D: drive as the master drive, setting CMOS and jumper settings.
- 2). Boot to Windows 95 from the new drive.
- 3). Enable any previously disabled Anti-Virus, or Screen saver programs.
- 4). Enable any APM system disabled previously.

4.1F Adding A New Hard Drive, When The Source Drive Is Compressed (DS3) (Second Method)

Note: If the source drive has enough room, you should de-compressed it and proceed using the Standard Method from above.

A compressed drive is not a real disk drive, although to most programs it appears to be. Instead, a compressed drive exists on the hard disk as a compressed volume file (CVF). A CVF is a file with read-only, hidden, and system attributes, and that contains a compressed drive. Each CVF is located on an uncompressed drive, which is referred to as the CVF's host drive. A CVF is stored in the root directory of its host drive and has a filename such as DRVSPACE.000 or DBLSPACE.000. The EXCLUDE.LST file should contain these entries by default. If it does not please add them before continuing.

Most CVFs can store more data than the space they use on their host drives; for example, a typical CVF might use 100 MB of space on its host drive but contain 200 MB of compressed data. DriveSpace assigns a

drive letter to the compressed volume so that you can use it as a disk drive and can access the files it contains. The host drive will have a separate drive letter (although it might be hidden).

Please read through these directions before attempting the transfer. Do not read these directions while you are performing the transfer, if you do you may leave out procedures/steps that may need to be performed ahead of the transfer phase.

NOTE: In the following example, it is assumed that you are copying the contents of drive C: onto drive D: and that you will be making this new drive(D:) your bootable drive C:. Also it is assumed that the drive D: is a blank drive. Substitute drive letters as per your individual conditions. Also note that it is assumed the H: is the host for C: and that G: will become the host for D:

Setup instructions

- 1). Configure the new C: drive as drive D: adjusting CMOS & jumper settings.
- 2). Prepare new drive: Run: FDISK to setup the partition on drive D: **Primary *Not Active*)** Reboot and run **FORMAT D: /U (*No System Files*)**.
- 3). Compress drive D: using the same compression software as C: was compressed with.
- 4). Make sure no Anti-Virus, Screen saver, programs are running.
- 5). Make sure any APM enabled through CMOS or Software is disabled.
- 6). Remove DRVSPACE.INI and DBLSPACE.INI from the EXCLUDE.LST file.

Transfer Procedure

- 1). Boot to a DOS prompt. *(Hit the F8 key when you see "Starting Windows 95", and choose option #5 <non-network> or #6 <network> "Command Prompt Only")*.
- 2). Run TRANSX95. Select drive H: as the source and drive G: as the destination.
- 3). Choose "Transfer Boot Code". *NOTE: if you will be booting from this drive make it active when prompted* (After this process the computer will reboot).
- 4). Boot into Windows 95. *(Safe Mode) (Hit the F8 key when you see "Starting Windows 95", and choose option #3 "Safe mode")*.
- 5). Shell to a DOS session(BOX). *(Start|Programs|MS-DOS Prompt)*.
- 6). Run TRANSX95. Select drive C: as the source and drive D: as the destination.
- 7). Choose "Transfer Data"
- 8). "Exit" TRANSX95.
- 9). EXIT back into Windows 95. *(Type: EXIT at the DOS prompt)*
- 10). Shut down the system. *(Power Off)*

Finishing Touches

Note: When you compress a drive using DS3 it will create a DBLSPACE.INI file on the root of the boot drive. This file is hidden and must be edited on the new drive D: before moving the drive D: to C:

- 1). At the D: command prompt enter ATTRIB -R -S -H DBLSPACE.INI
- 2). Type EDIT DBLSPACE.INI
- 3). Toward the bottom of the file you should see two lines here are examples:

```
ActivateDrive=H,C0
ActivateDrive=G,D0 <-- Remove
```

- 4). This second entry needs to be removed.

- 5). Save DBLSPACE.INI and close EDIT.
- 6). At the D: command prompt enter ATTRIB +R +H +S DBLSPACE.INI
- 7). Re-configure D: drive as the master drive, setting CMOS and jumper settings.
- 8). Boot to Windows 95 from the new drive.
- 9). Enable any previously disabled Anti-Virus, or Screen saver programs.
- 10). Enable any APM system disabled previously.

4.1G The "Clone Drive Function"

The "Clone Drive" function is used to export, or copy the contents of the source drive to the destination drive. This is accomplished through the use of low level (BIOS) functions. The one main disadvantage with using this function, over the Transfer Data function is that both the source and destination drives must have the same cluster size, and the drives must be LOCKED before you start. If you plan on booting from this drive, make sure you do a "Transfer Boot Code" procedure first. You will also need to change your CMOS settings, and jumpers on the hard drive itself, Please refer to the respective manuals for instructions for each. NOTE: Before doing a "Transfer Boot Code" or "Clone Drive" function please run Norton Disk Doctor, or Scandisk, and completely defragment the destination drive with either Norton Utilities Speedisk for 95, or Windows 95 Disk Defragmenter. Note: Windows 95 Defrag does not do a total defragmentation of a drive, all open file will be marked as unmovable while running Windows 95 Defrag.

4.1H The Clone Procedure, Adding A New Hard Drive

NOTE: In the following example, it is assumed that you are copying the contents of drive C: onto drive D: and that you will be making this new drive(D:) your bootable drive C:. Also it is assumed that the drive D: is a blank drive. Substitute drive letters as per your individual conditions.

Setup instructions

- 1). Configure the new C: drive as drive D: adjusting CMOS & jumper settings.
- 2). Prepare new drive: Run: FDISK to setup the partition on drive D:
Primary *Not Active*) Reboot and run FORMAT D: /U **(*No System Files*)**.
- 3). Make sure no Anti-Virus, Screen saver, programs are running.
- 4). Make sure any APM enabled through CMOS or Software is disabled.

Clone Procedure

- 1). Boot to a DOS prompt. **(Hit the F8 key when you see "Starting Windows 95", and choose option #5 <non-network> or #6 <network> "Command Prompt Only")**
- 2). Run TRANSX95. Select drive C: as the source and drive D: as the destination.
- 3). Choose "Transfer Boot Code". **NOTE: if you will be booting from this drive make it active when prompted** (After this process the computer will reboot).
- 4). Boot into Windows 95. **(Safe Mode) (Hit the F8 key when you see "Starting Windows 95", and choose option #3 "Safe mode")**.
- 5). Shell to a DOS session (BOX). **(Start|Programs|MS-DOS Prompt)**.
- 6). Run TRANSX95. Select drive C: as the source and drive D: as the

destination.

- 7). Choose "Clone Drive".
- 8). "Exit" TRANSX95.
- 9). EXIT back into Windows 95. (*Type: EXIT at the DOS prompt*)
- 10). Shut down the system. (*Power Off*)

Finishing Touches

- 1). Re-configure D: drive as the master drive, setting CMOS and jumper settings.
- 2). Boot to Windows 95 from the new drive.
- 3). Enable any previously disabled Anti-Virus, or Screen saver programs.
- 4). Enable any APM system disabled previously.

////////////////////////////////////
THE FOLLOWING INSTRUCTIONS ONLY APPLY TO TRANSFER 95 PROFESSIONAL
EDITION.
////////////////////////////////////

5.0 Overview of DISK #1, DISK #2, DISK #3

The main reason for DISK #3 is that the minimum files will not fit on the DISK #2 with the IFSS program and support files. Once you have created these disks you will not need to re-create them unless you upgrade Windows 95 from build 950/950a to Windows 95 build 950b. You may also need to re-create a new DISK #2 if you reinstall Windows 95 onto a new motherboard with a significantly different hardware profile. Below are the basic purposes of these disks.

DISK #1

This is the boot floppy used when you are going to need, or be using the IFSS program. You may need to add 16-bit drivers into either the Config.sys or Autoexec.bat file depending on your specific usage. This disk must be made as a Windows 95 Startup disk. Do not simply do a FORMAT A: /S as this will not work.

DISK #2

This disk holds the IFSS program, and a minimal set of files collected from your Windows 95 installation. Some of these files are hardware specific. There will be a subdirectory created on this disk called TRANSFER. Its contents will need to be copied onto the target drive prior to execution of either TRANSX95.EXE or the ICOPY32 programs- if you intend on using these programs with the IFSS program. In a network/local case this directory should have been installed before, and there is no need for this disk.

DISK #3

This disk should contain the minimal Transfer 95 file set. The contents of this disk also needs to be copied to the target drive prior to execution of either TRANSX95.EXE or ICOPY32. It is recommended that you create a directory TRANSFER on the target drive, and the contents of both DISK #2 and DISK #3 be placed there. In a network/local case these files should have been copied into the TRANSFER sub-directory already, in which case there is no need for this disk.

5.1 DISK #1,2,3 Creation Notes

Make sure that when a system file is called for like "HIMEM.SYS" that it corresponds to the version (Build) of Windows 95 that you will be transferring. If you mix these file you will receive errors.

5.2 Boot Disk Creation (DISK #1)

- 1). Create a Windows 95 startup disk. (Assume this to be drive A:)
START > SETTINGS > CONTROL PANEL > ADD/REMOVE PROGRAMS > STARTUP DISK > CREATE DISK.
- 2). Copy HIMEM.SYS & IFSHLP.SYS from WINDOWS directory to the boot disk.
- 3). Copy SYS.COM & ATTRIB.EXE from WINDOWS/COMMAND directory to the boot disk.
- 4). Add a CONFIG.SYS file to the boot disk, and add the following lines:
DEVICE=A:\HIMEM.SYS
DEVICE=A:\IFSHLP.SYS
- 5). Add a AUTOEXEC.BAT file to the boot disk, and add the following lines:
@ECHO OFF
SET TRANSFER95=1
- 6). Label this DISK #1.

5.3 IFSS Instructions

Notice: You will need three formatted 1.44MB floppies.

Boot Disk Preparations:

- 1). Create a Boot disk see above.

Note: You may need to add other drivers into the Autoexec.bat & Config.sys files and you may also need to add these files to the drive.

IFSS Installation (DISK #2):

- 1). Place a blank formatted disk into A: drive (A: is assumed to be your floppy drive).
- 2). Use IFSSINST.EXE to install IFSS onto the floppy disk or other drive.

Usage: IFSSINST [/I:D:\PATH, /F]

Switchs:

```
/I:Path - Install drive and path
i.e. Install to A:\TRANSFER
IFSSINST /I:A:\TRANSFER
/F      - Do a FULL install.
i.e. Install both DISK#2 & DISK#3
IFSSINST /I:C:\TRANSFER /F
```

Example: IFSSINST A:\TRANSFER

Assuming you want to install IFSS to A: drive, and creating a directory TRANSFER

- 3). Label this DISK #2

Note: The "Install drive and path" can be a network drive. This works well with Novell networks. If this is the case, use the /F switch and

there is no need to create DISK#3 because all of the necessary files are now contained in the install directory. In this case you would only need DISK#1 at the download workstation. This can also be done in the case of a local hard drive, if your making backups with ICOPY32.

IFSS Usage:

Note: We will assume that you are installing to drive C: and further that you cannot boot into Windows 95. (See other directions for specific operational uses). In the case where DISK#2 & DISK#3 are installed onto either a network or local hard drive, skip this procedure and use IFSS network/local instructions.

- 1). Boot from the boot floppy. (DISK #1)
- 2). Swap DISK #1 for DISK #2
- 3). Enter A:
- 4). Enter CD TRANSFER
- 5). Enter XCOPY *.* C:\TRANSFER /S
- 6). Swap DISK #2 for DISK #1
- 7). Enter C:
- 8). Enter CD TRANSFER
- 9). Enter IFSS

Note: This will start a mini Windows 95 session, and you will be at the C:> prompt. You are still in the C:\TRANSFER directory, but this new DOS thread does not have the same environment.

At this point the IFSS program is operational. Reboot to unload.

IFSS Network/Local Usage:

Note: Network is assumed, and M: will be used as the network drive.

- 1). Boot from the boot floppy. (DISK #1)
- 2). Enter M:
- 3). Enter CD TRANSFER
- 4). Enter IFSS

Note: This will start a mini Windows 95 session, and you will be at the M:> prompt. You are still in the M:\TRANSFER directory, but this new DOS thread does not have the same environment.

At this point the IFSS program is operational. Reboot to unload.

Transfer 95 Minimal File Set (DISK #3):

This disk will be used to hold the minimum files for Transfer 95 Professional Edition to work.

- 1). Place a blank formatted disk into A: drive (A: is assumed to be your bootable floppy drive)
- 2). Copy the following files to drive A:
 - Transx95.exe
 - Tcopy32.exe
 - Icopy32.exe
 - Exclude.lst
 - Extexc.lst
- 3). Label this DISK #3

Note: In the network/local case above just COPY *.* from the directory where you have installed Transfer 95 into M:\TRANSFER

5.4 Adding A New Hard Drive, When the Destination Drive Uses Overlay Software

NOTICE: If the source drive uses overlays but the destination drive does not, then see "Adding A New Hard Drive Standard Method"

Please read through these directions before attempting the transfer. Do not read these directions while you are performing the transfer, if you do you may leave out procedures/steps that may need to be performed ahead of the transfer phase.

NOTE: In the following example, it is assumed that you are copying the contents of drive D: onto drive C: and that new drive C: will be your boot drive, and require an overlay to run. Also it is assumed that the drive C: is a blank drive. (Except for the overlay software). Substitute drive letters as per your individual conditions.

Note: You will need a copy of the IFSS program installed to complete the following steps.

Transfer Procedure

- 1). Create a Boot Disk (DISK#1) see Boot Disk Creation.
- 2). Install the new drive as C:
- 3). Install the overlay software onto drive C: (As per instructed) This should/may include FDISK (Active) & FORMAT.
- 4). Setup your old drive C: as drive D: or somewhere in the drive chain. (Assume drive D:)At this point it is assumed that your Windows 95 files are located on drive D: and you cannot boot into Windows 95.
- 5). Boot from the startup disk. (May require special keys refer to overlay instructions).
- 6). Run IFSS as per instructed in the IFSS instructions.
- 7). Run Transfer 95 and transfer data from D: to C:
- 8). From the startup disk enter SYS C:
- 9). From the root of C: drive enter A:\ATTRIB -R -H -S MSDOS.SYS
- 10). From the root of D: drive enter A:\ATTRIB -R -H -S MSDOS.SYS
- 11). From the root of D: drive enter COPY MSDOS.SYS C:\MSDOS.SYS (Overwrite).
- 12). From the root of D: drive enter A:\ATTRIB +R +H +S C:\MSDOS.SYS

Boot from the new C: drive.

5.5 Using Icopy32 & A Network Server

Note: In the following instructions you will be instructed to use the IFSS program, although please note that this procedure may work just as well in Windows 95 safe mode with network support.

NOTE: With the diversity of servers and network configurations, ITS Systems will not supply support or be expected to supply any network information beyond that presented in this documentation, or other supplied documentation.

Upload Process:

- 1). Create a Boot Disk (DISK#1) see Boot Disk Creation.
- 2). Add your network drivers to the newly created boot floppy and edit the Config.sys & Autoexec.bat files on the floppy as necessary to access the network.

- 3). Create a DISK #2 (See IFSS Installation under IFSS Instructions)
- 4). From DISK #2 in the A:\TRANSFER directory type: XCOPY *.* C:\TRANSFER /S
- 5). From DISK #3 in the A:\ directory type COPY *.* C:\TRANSFER
- 6). Boot the computer from the boot floppy. (DISK #1) If you have not already.
- 7). Change to drive C: and then to the C:\TRANSFER directory. (CD TRANSFER)
- 8). Start the Installable Filing Systems Shell (IFSS)
- 9). ICOPY32 /S:C: /T:M:\TEST\ /U (This assumes you will be placing the image file on a drive M: in subdirectory TEST which has previously be created, and that your source is drive C:

Note: This completes the upload process. You may not have to repeat the above procedure again. Just use the image file as uploaded to create multiple downloads.

Download Process:

- 1). From the download machine prep. the new drive (Install new drive, Setup geometry...).
- 2). Boot the download machine from the boot floppy (DISK #1)
- 3). FDISK drive C: on this machine setting the primary partition to active. (Use FAT32 if wanted).
- 4). Reboot & Format drive C: FORMAT C:
- 5). Place DISK #2 into drive A:
- 6). From DISK #2 in the A:\TRANSFER directory type: XCOPY *.* C:\TRANSFER /S
- 7). From DISK #3 in the A:\ directory type COPY *.* C:\TRANSFER
- 8). Replace DISK #2 with DISK #1. (Assign COMMAND.COM/COMSPEC as necessary. A:\COMMAND.COM).
- 9). Change to drive C: and then to the C:\TRANSFER directory. (CD TRANSFER).
- 10). Start the IFSS program Enter: IFSS at the command prompt.
- 11). ICOPY32 /S:M:\TEST\ /T:C /D (See step 8 from above for perspective)... NOTE: There is no ':' after the C in the target.
- 12). Remove the boot floppy from drive A: (DISK #1)

At this point you should be ready to boot from the local hard drive.

5.6 Using Icopy32 for backing up

Note: In the following instructions you will be instructed to us the IFSS program, although please note that this procedure may work just as well in Windows 95 safe mode. In the following we will assume that you are using a ZIP drive as a backup unit. And that this drive is drive E:

NOTE: It is assumed that you have particular knowledge about the drivers needed to connect to the hardware used for backup in a DOS only mode.

Upload/Backup Process:

- 1). Create a Boot Disk (DISK#1) See: 5.2 Boot Disk Creation.
Note: Please create disks #2 and #3 also at this time.
- 2). Add the drivers needed for your hardware to the newly created boot floppy and edit the Config.sys & Autoexec.bat files as necessary to access the this hardware.
- 3). Install the IFSS program to a local hard drive
I.E. IFSSINST C:\TRANSFER

- 4). Copy the contents from your Transfer 95 directory into this new directory
COPY C:\TRANSX95*.* C:\TRANSFER
Note: At this time you may remove the C:\TRANSX95 directory and its contents to save space.
- 5). Boot the computer from the boot floppy. (DISK #1) If you have not already done so.
- 6). Change to drive C: and then to the C:\TRANSFER directory.
(CD TRANSFER)
- 7). Start the Installable Filing Systems Shell (IFSS)
- 8). ICOPY32 /S:C: /T:E: /U /SPAN
- 9). You will be prompted to insert new disks as necessary. When you have inserted the next disk press any key to continue.

Note: This completes the Upload/Backup process. You may not have to repeat the above procedure again. Just use the Image/Backup file as uploaded to create multiple re-stores.

Download/Restore Process:

- 1). From the download/restore machine prep. the new drive (Install new drive, Setup geometry, ...).
- 2). Boot the download/restore machine from the boot floppy (DISK #1)
- 3). FDISK the new drive (If necessary) on this machine setting the primary partition to active. (Use FAT32 if desired).
- 4). Reboot & Format the new drive (If necessary) FORMAT C:
- 5). Place DISK #2 into drive A:
- 6). Change to drive A: and then to the A:\TRANSFER directory.
(CD TRANSFER).
- 7). Copy this directory onto the new drive. XCOPY *.* C:\TRANSFER /S /E
- 8). Place DISK#3 into drive A:
- 9). Change to drive A: and then copy these files into the TRANSFER directory. COPY *.* C:\TRANSFER
- 10). Change to drive C: and then to the C:\TRANSFER directory.
(CD TRANSFER).
- 11). Start the IFSS program Enter: IFSS at the command prompt.
- 12). ICOPY32 /S:E: /T:C /D (See step 9 from above for perspective).. NOTE: There is no ':' after the C in the target.
- 13). You will be prompted to insert disks from the set when necessary.
Note: Only the primary drive needs to be labeled in order. All others can be placed in in any order.
- 14). Remove the boot floppy from drive A: (DISK #1) and reboot.

At this point you should be ready to boot from the hard drive.

6.0 Contact Information

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