 Control Menu Box - located in the upper left-hand corner of a Windows application screen. Select to access an application <u>Control Menu</u> for switching to other applications, etc.

Commands and Actions List

Lankford Screen Copy Utility Main Screen

The **Main Screen** contains all <u>control menu items</u>, application menu items, command buttons, controls, and application text items.

Control Menu Items

Move: enables the automatic dragging (movement) of a minimized screen.

Close: provides an alternate (system level) method to end/close/terminate an application.

Switch To...: provides the ability to switch between executing applications, or terminate selected applications.

Application Menu Items

File

Print Scale: changes the scale used to print selected images.   The default scale is 100% (the actual size of the image).   The user can select to print images at 25%, 50%, 75%, 100%, 125%, 150%, 175%, 200%, or a preassigned custom % of the original image size (to scale the printed image up/down for the printer).

Exit: exits/closes/terminates the application.

Run

Start Screen Copying: enables   the screen copy process.   While enabled, whenever the user presses the PRINT SCREEN key or the ALT+PRINT SCREEN keys, screen capturing/copying/saving is performed.

End   Screen Copying: disables the screen copy process.

Options

View   All Image Files: continually cycles through ALL images, in full-screen mode.   The image is advanced whenever the user clicks the mouse and the continual cycling stops when the user double-clicks the mouse.

Print   All Image Files: allows the printing of ALL image files, bit-for-bit and file after file, upon user confirmation.

Rename All Image Files: allows/facilitates the renaming of ALL image files.

Delete All Image Files: allows deletion of ALL image files that are stored, at once, upon user-confirmation.

Set Custom Print Scale: allows the user to set a customized print scale not otherwise selectable from the defined print scales in 25% increments.   Custom scale values are

allowed from 1% to 1000% of the original image size, in 1% increments.   When set, the custom scale value is available from the Print Scale menu, and is retained when the program closes.

Resequence Image Files: resequences the numeric names of stored image files, to start from 0.bmp, etc.

AutoStart Screen Copying: enables autostart screen copying.   When enabled, the screen copy process is automatically initiated when the program is next executed (also, the main screen is hidden behind all other active windows).

Help

Contents: displays the help-file contents/index page.

Search for Help on...: allows for user searchs of the help-file.

How to Use Help: provides the user with directions on how to use the help system.

Image File Size Information: displays the number of stored image files and the total size, in bytes, of disk storage used.   The average stored file size, in bytes, is also displayed.

About Lankford Screen Copy Utility...: displays the application "About" box containing copyright data, logos, credits, etc.

Command Buttons and Controls

File List Box: contains the names of stored image files, for user selection.

Image Preview Box: provides a preview image (small size) for the selected image file.

View Full: provides a full-screen (full-size) view of the selected image file.   When displayed full-screen, the user can press any key or mouse click to quit viewing and return to the main screen.   The "View Full" capability can also be initiated by clicking the mouse on the preview image, or by double-clicking the mouse on the filename in the file list box.

Print: sends the selected image file bit-for-bit to the default printer.

Rename: provides the ability for user renaming of the selected image file.

Delete File: optionally (with user confirmation) deletes the user-selected image file.

Copy: copies the selected image/picture to the Windows Clipboard, from which the picture may be pasted into other applications.   Note - this button is disabled while screen copying is active, and re-activated when screen copying is ended.   This is required, as the screen copying process uses the Windows Clipboard.

Keyboard Keys and Key Combinations

PRINT SCREEN: the single key pressed by the user on the keyboard, captures and stores the entire screen image into a disk file.   The **Start Screen Copying** menu item must have been previously selected by the user, or the autostart capability is in effect, in order for the screen capture/copy/save to take place.

ALT+PRINT SCREEN: the **PRINT SCREEN** key pressed by the user on the keyboard while holding the **ALT** key down, captures and stores the active window image into a disk file. The **Start Screen Copying** menu item must have been previously selected by the user, or the autostart capability is in effect, in order for the active window capture/copy/save to take place.

Contents for Lankford Screen Copy Utility Help

Lankford Screen Copy Utility is a Windows-based program for automating the capturing/copying/saving of Windows screen images (and DOS application screens, when executed from within Windows) to disk files at the press of a key, and managing stored screen images.   In short, if you can see it on a monitor screen, then this utility can capture it, save it to a file, display it, and maintain it.

The program may best be described as a **"must-have"** Windows/CD-ROM/Game/Internet/Online Service support/add-on utility.   Use of the program should greatly enhance the enjoyment of CD-ROM software, games, and online service/internet experiences.   The remainder of the help provided by this help-file is devoted to briefly describing the use of the program, and the user is strongly encouraged to experiment/practice with the utility in order to get a firm grasp of its capabilities, and what exactly the program can do for them.   Once you become familiar with the way it works, you will be pleased with the things it allows you to do with minimal efforts.

Utility Description
What the Utility Does
Uses for the Utility

Usage Information
How to Use
Commands and Actions List

Misc. Details
Version History
Additional Notes
Copyright

How to Use

To Run/Start/Execute/Initiate LSCU

The program can be executed in any one of three ways: by double-clicking the Lankford Screen Copy Utility (LSCU) program group icon from the Windows Program Manager and then double-clicking the LSCU program item icon, or via selection of the **RUN** option from the Program Manager or File Manager **FILE** menu option, or by double-clicking the **LSCU.EXE** file name in the File Manager.

To End/Stop/Exit/Close LSCU

The program can be terminated in any one of three ways: by selecting the **EXIT** item from the **FILE** menu item of the program, or selecting **CLOSE** from the <u>control menu</u>, or by selecting **END TASK** from the Windows Task Manager task list.   Note that ending the program execution does indeed disable the screen copy capability for that session.

To Get Help

Select help items from the **HELP** menu items.

To View, Rename, Print, or Delete Stored Screen Images - Single Files

Select the image file name from the file list box and click the appropriate command buttons for the operation desired.   Note that when viewing a single image file, a single mouse click or keyboard key press will end the display.

To View, Rename, Print, or Delete Stored Screen Images - ALL Files

Select the appropriate menu items under the **OPTIONS** menu item.   Note that when viewing all image files, single mouse clicks cause the image display to cycle through the stored images (advancing image-by-image continually), and a mouse double-click will end the viewing display.

To copy an existing/saved image/picture to the Windows Clipboard

Select the desired image/picture file (.bmp) from the file listbox, and click the Copy command button.   When a file is selected, a preview image is shown in the preview box.   If you want to copy the image to the clipboard (for pasting into another application), simply press/click the Copy button, and the image will be loaded into the clipboard.   Note, however, that this function is disabled while the screen copy mode is active.   LSCU uses the clipboard for screen copy operations, and would interfere with the Copy command function. When screen copying is stopped/ended, the Copy command button is enabled once again, for copying stored images to the clipboard.

To Configure the Program to Automatically Enable the Screen Copy Mode When the Program Executes

Select the **AUTOSTART SCREEN COPYING** menu item from the **OPTIONS** menu.   Note that when the program is next executed, the screen copy mode will automatically be enabled, with the main screen hidden behind all other active windows, until you switch back to the program from the Windows Task Manager.   Also, the autostart mode will be active each execution until you switch it off (option is a toggle switch).   This autostart mode is particularly useful if you want the screen copy mode enabled whenever Windows starts, via placing a program item for the LSCU in the Windows Startup group.

To Switch to Other Tasks Running in/from Windows

Select the **SWITCH TO...** item from the control menu and then select the application you would like to switch to.

To Switch Back to LSCU from Other Applications

Select the **SWITCH TO...** item from the other applications control menu (including the Program Manager) and then select **LSCU** to switch to.

To Enable/Disable the Screen Copying Capability

Select **START SCREEN COPYING** or **END SCREEN COPYING** from the application menu **RUN** item.

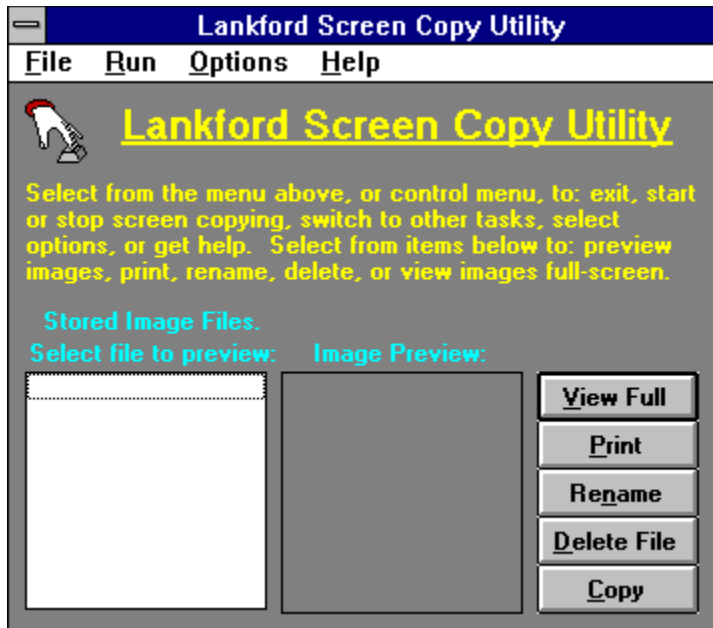## To Capture/Copy/Save Screen Images to Disk Files

While screen copying is enabled, press the **PRINT SCREEN** key on the keyboard to save the entire screen contents, or press **ALT+PRINT SCREEN** (pressing **PRINT SCREEN** key while **ALT** is held down) to save the contents of only the active window.

Typical Usage Directions (Putting it all together)

1.   Start/execute/initiate the **LSCU** program
2.   Enable the screen copying capability
3.   Switch to an application that you want to save screens from
4.   Press **PRINT SCREEN** or **ALT+PRINT SCREEN** to save a screen image
5.   Repeat steps 3 and 4 as often as desired/needed
6.   When finished copying screens, switch back to **LSCU**
7.   Disable screen copying (disables when program ends anyway)
8.   View, delete, print, rename, ... screen images as you wish
9.   Exit the program when finished

Note that if executed when the AutoStart copy mode is enabled, that step 2 is automatic, and that step 3 is not performed from LSCU.

Further, note that if executed when the AutoStart copy mode is enabled and there is a LSCU program item in the Windows Startup group, then step 1 is also automatic.

Lankford Screen Copy Utility

File   Run   Options   Help

Lankford Screen Copy Utility

Select from the menu above, or control menu, to: exit, start
or stop screen copying, switch to other tasks, select
options, or get help. Select from items below to: preview
images, print, rename, delete, or view images full-screen.

Stored Image Files.

Select file to preview: Image Preview:

View Full

Print

Rename

Delete File

Copy

Additional Notes

Unless specified to the contrary (explicitly), the acronym **LSCU** is intended/assumed to represent **"Lankford Screen Copy Utility"** throughout this help-file, the utility software itself, and in any other associated documentation.

Screen images captured/copied and saved to a disk file are saved as **.BMP** (bit-mapped) files.   The selection of the **.BMP** format was based on multiple details of image manipulation and trade-offs between formats.   The **BMP** format is fastest to read/write to/from disk files and is a commonly accepted format for most all graphics/image manipulation packages.   The utility needs to be able to write captured images to disk as fast as possible, thus ruling out the compressed formats.   After all, the user can always convert formats after the fact, with graphic file format conversion programs.

Screen images stored in disk files are stored as follows: the first file ever written will be "**0.bmp**", the next will be "**1.bmp**", the next "**2.bmp**", the next "**3.bmp**", etc., ..., until "**99999999.bmp**" has been written.   Yes indeed, that is a possible **100,000,000** files that can be stored before the program cycles back to and rewrites "**0.bmp**".   That is, **one-hundred million** files will have been created before the very first one is rewritten!   Of course, by the time that you have written one-hundred million files, you most certainly would have renamed the first one and/or archived it, if it was important in the least.   Also, the user can always use the resequence option to reset the file names, beginning at **0.bmp**, etc.

Image files written/stored by the program are saved in subdirectory **\scrn-pix** in the same directory where the LSCU application resides.   For example, if you loaded the LSCU application to the default location specified by the setup program, then the saved images will be stored in **c:\lscu\scrn-pix** and files will be saved as **c:\lscu\scrn-pix\0.bmp** , ..., etc.

The size of the BMP image files created (determined by the image size, dimensions, and color depth) is determined by the Windows color resolution mode that you are working in.   If your display color mode is set to **8-bit** color **(256 colors)**, then .BMP files created will also be 256 color images.   If your display color mode is set to **24-bit** color **(16.7 million colors)**, then .BMP files created will also be 16.7 million color images.   Note that if you are set for 24-bit color in the Windows display color mode, then images captured/copied/saved will be 24-bit images **regardless** of the actual number of colors contained in the image. Hence, it may be in your best interest to operate the utility from the lower resolution Windows color mode (8-bit, 256 colors) if file sizes pose a problem (8-bit 256 color images use 1/3 the disk space of the 24-bit 16.7 million color images).   However, if you have other image manipulation software available, you can always reduce the color depth of stored 24-bit bit-mapped images.   This color/size issue is interesting, in the sense that this appears to be a characteristic of all Windows-based image manipulation programs, that they inherit the operational color mode from Windows itself.

The LSCU Main-Screen image (colors, fonts, etc.) may deviate slightly from the image shown in this help-file, due to font availability and Windows display color depth mode on your system.

This utility was designed from inception to operate in the Windows 3.1x environment, and was entirely tested in that system.   While the utility has also worked under Windows 95 in the past (previous versions), this is not an indication that this particular version will also. However, you will know almost immediately if it does not work with Windows 95, as it should be obvious if the program does not execute or allow the screen capture of the very first screen image.   This is the beauty of the shareware concept, as you will know without a

doubt if the software works on your system, before spending a dime.

Windows, **MS-Windows**, **Windows 3.1x**, **Windows 95**, **Microsoft Windows**, **DOS**, **MS-DOS**, etc., are all registered trademarks, or derivations of trademarks, belonging to **Microsoft Corporation**.   The trademarks represent the associated copyrighted software produced by **Microsoft Corporation**, the copyright holders.

Comments on the LSCU utility software should be in **WRITTEN** form only and addressed to the author as follows:

> **C. L. Lankford**
> **108 Marshall St. SW**
> **Hartselle, AL   35640-4106**

or, via e-mail to: **lankford@net-master.net**

The LSCU program itself was employed to assist in the development of its own help-file, this very file.

As with most other software these days, there is a disclaimer.   While there is no possible way for the utility to damage any hardware or software, it is probably best to disclaim damages anyway.   So, here it is: **the author hereby disclaims and refutes any/all responsibility for any hardware and/or software damages resulting from the use or misuse of this program (LSCU).   Users of this utility explicitly assume full responsibility for any damages to their hardware or software, that might result from usage of the utility.   Further, users of this utility hereby hold the author blameless for any damages, either real, perceived, or imaginary**.   Any person not in complete agreement with the foregoing text should not utilize this software for any purposes, whatsoever.

Copyright (c) 1996-1997 C. L. Lankford
All Rights Reserved

UTILITY SETUP

Setting up the utility is quite simple.   If you received the software as a compressed archive file (.ZIP, .ARJ, etc.), then you must first "unzip" (for .ZIP files), or whatever de-archive procedure required, the files to a temporary location on disk (c:\temp, for example).   Next, you run/execute the setup.exe program that was placed in the temporary location (which completes the LSCU setup on your system).   That is it!   You are now ready to execute the LSCU software when you want.   To execute, double click on the LSCU program item in the LSCU program group of the Program Manager.   As always, make a backup of the original archive file, just in case you ever need to reinstall the package.

REQUIREMENTS

An IBM/compatible personal computer, 386 or better, with a hard-drive large enough to hold the images to be saved.   Windows 3.1x/W95 operating system and file **VBRUN300.DLL** (should be located in your Windows System directory (**c:\windows\system**, for example). The **VBRUN300.DLL** file can be downloaded from almost anywhere, if you don't have it. Sources to check are: America OnLine, CompuServe, Prodigy, the Internet itself, or various BBS services.   If you don't already have it, you can probably find it in about ten minutes.

Once found, and downloaded, place a copy of the file in the Windows System directory as mentioned above.   Also, printing of images requires a color-compatible printer.

PACKAGE CONTENTS

        SETUP.EXE   - Setup/installer Program
        LSCU.EXE   - LSCU Program
        UNINST.EXE   - Uninstaller Program
        LSCU.HLP   - Windows Help File
        README.TXT   - Description, installation, and usage notes
        FILE_ID.DIZ   - Description file for Online Services/BBS, etc.
        LSCUSPRT.DLL- LSCU Support DLL
        CTL3D.DLL   - Windows 3-D DLL Library File

Optionally, you may also wish to include the following file in your software packaging and/or distributions:

        VBRUN300.DLL (VB 3.0 Runtime Dynamic Link Library)

This file is the VB runtime library required to execute ANY VB 3.0 program.   If you provide it, you are doing so for the convenience of your client/user.   **You should NOT include this file for distribution to online services or BBS, due to its size and commonality of use by ALL VB 3.0 programs.**   If you do include this file for other distributions, the setup program will detect it and install it for you.

The above files constitute the entire application package.   If you archive (.ZIP, .ARJ, etc.) the package for distribution to other people or BBSs, please include the above files.   Distribution of the package is encouraged (uploading to BBS, online services, internet, etc.), subject to the following conditions:

        - The **complete** package must be distributed, this means the files
           above (required files, and VBRUN300.DLL, if desired) and no others.

        - You have **NOT** modified/altered any of the listed files.

        - You have **NOT** included any registration codes with the package.

MESSAGE TO BBS/ONLINE SERVICES/SOFTWARE LIBRARIES/VENDORS/DISTRIBUTORS

Subject to the package contents restrictions above, you are hereby authorized to accept this package from ANY individual (or other source) for distribution via your service, diskettes, CD-ROM, etc.   In fact, it is fully encouraged and desired.

Move	
Close	Alt+F4
Switch To...	Ctrl+Esc

 Control Menu - located in the upper left-hand corner of a Windows application screen. Accessed by selecting a <u>Control Menu Box</u>.   Select items to perform system level tasks (switching to other applications, etc.).

Uses for the Utility

While it is certainly true that there are literally thousands of uses for this utility, it is still probably worth mentioning a few of them.

Surfing the Internet: if you see something you like, you can copy it, regardless of browsers, image formats, download ability, etc.   Also, remember that all you have to do is press a key to save the image to a file (all image acquisition, file naming, file creation, copying, saving, etc., is done for you automatically by the program).

Using commercial online services (America OnLine, etc.): same type of reasoning as surfing the internet, but with additional value since the commercial services usually don't let you copy much of what you can see on the screen.   Also, since time is money when using a commercial service like CompuServe, etc., remember that using this utility can really save some online dollars since you can save a screen without doing anything more than the press of a key.

Playing games: you can save screens as proof to your friends that you really did achieve a certain score/level in a game, etc.

Using CD-ROM applications: want a copy of something you see that a CD-ROM application displays, but the application will not let you copy it?   No problem, just press a key and a copy is yours, regardless of anybody's intention to prevent images from being copied, or the inability of the software to support copying.

Capturing ScreenSaver shots: want a picture of your screensaver?   Just press the Print Screen key as your screensaver executes.

Animation frame-grabbing: seems to work with AVI and FLI animations, will possibly work with others.

Manual Compilation: people have used previous versions of LSCU to assist them in the generation of images to become part of user's manuals, etc.

Helpfile Creation: Windows software developers can use the LSCU to capture images of various aspects of their programs (screens/forms, messages, etc.), for insertion into the Windows helpfile that will be distributed with their product.

Version History

V1.0: Initial release of LSCU package.   (May 1996)

V1.1: Modified user-interface screens to look the same (or similar) regardless of Windows color-depth mode, enhanced documentation, tightened/optimized coding (performance related), added custom print scale capability, misc. code/performance refinements.   (June 1996)

V1.2: Added Pseudo-3D look to dialogs/messages, enhanced the internal runtime error checking/trapping/corrections, added autostart capability, misc. code/performance refinements.   (July 1996)

V1.3: Added capability to resequence stored image files, further optimized coding for speed/size/resource concerns, misc. code/performance refinements, reworked setup program.   (August 1996)

V1.4: Corrected a potential user-registration glitch, added stored image file count and size info, enhanced documentation, misc. code/performance refinements.   (September 1996)

V1.5: Modified autostart capability to hide minimized icon when started, added further runtime error checking/trapping/corrections, misc. code/performance refinements, enhanced coding of setup program.   (October 1996)

V1.6: Added version history to documentation (as detailed as memory and notes allow), updated documentation, modified autostart capability to completely hide the program window when started (window is now placed behind all other windows when the program loads), repaired a minor glitch in help topic search menu item (previously, a single spurious character was displayed in the initial topic search window topic user-entry box), added an exit button to the online help file lscu.hlp to provide faster exit capability, added an uninstallation program, enhanced the image preview to preserve the proper image aspect ratio.   (December 1996)

V1.7: Added the capability to copy captured images/pictures to the Windows Clipboard, updated documentation, added a "credits" item to the program info/about box, added code to activate a LSCU previous instance window (if one exists), added a support DLL to enhance performance (image capture/saving/loading, execution speed, etc., are now very much faster than previous versions), changed demo screen display to show only on program termination, enhanced the looks of the program online help file.   (February 1997)

What the Utility Does

This utility automatically handles all of the details concerning the capturing/copying/saving of Windows screen images (and DOS application screen images, when executed from within Windows) to disk files, and the associated viewing and management of all stored files.   With the utility, capturing and storing what you see is simply a matter of pressing a key.

When executed, and the start screen copy option is activated by the user, whenever the user presses the **PRINT SCREEN** (copies the entire screen) or **ALT+PRINT SCREEN** (copies the active window only) the current screen image is automatically captured and stored in a disk file.   This process repeats each time the user presses the above mentioned key(s), until the user turns off the option, closes the program, or the disk fills up.

The utility handles all of the details of obtaining the screen image, creating unique file names for output, creates the output file, and provides the ability to preview, view full-screen, rename, print, or delete previously stored images.   There are a few programs on the market that claim to do some of the same tasks as this one, but certainly not for such a minimal cost.   Compare to the capabilities and costs of similar commercial **"Name-Brand"** programs, and you will see that the commercial version costs MANY times the price of this application and you cannot try it before buying it.

This utility has literally **thousands** of uses, is by all means as reasonably priced as humanly possible, is small (VERY tightly coded and use of graphic images by the program is kept to a bare minimum), is fast (tightly coded and optimized for speed), uses little memory, and we hope it is fairly simple to learn how to use.