

WLM.EXE V3.1 Copyright (C) 1993, Mark Kiehl, All Rights Reserved.

Keywords: Menu, shell, LAN, Windows, application monitor,

What is it?

WLM is a menu program for Windows which is designed to replace program manager and provide program usage tracking and restriction capabilities for local area networks. The programs may be installed locally, on the fileserver, or both. You specify the number of licences allocated for each program, even unlimited. Software access denials are logged to a file for documentation. Works with all programs written to run in the Windows environment and DOS applications via. PIF files. Automatically recovers license counts when a user reboots a PC. Allows automatic load of programs on startup (like Program Managers startup group). And much much more!

How much does it cost?

Nothing! It is provided as is for **free**. Feel free to distribute to anyone as long as it is distributed complete with all files and documentation. Anyone who wishes to *donate* money to me may send their check for \$5.00 or more to:

Mark Kiehl
3600 Ardmore Ave
Reading, PA 19605

You can contact me about any problems you may have at Compuserve: CIS:76247,3245

Testing

It was tested and currently installed on a Novell 3.x LAN w/ 12 nodes running Windows 3.1 locally from each PC (i.e. Windows is installed on local hard drive of PC rather than from the fileserver hard disk). Most Window's applications (MS Word, Excel, ...) are also installed on each PC's local hard disk. This was done in order to speed up the loading of applications and to reduce network traffic. All data is stored on the fileserver hard disk.

Features

WLM should work on any local area network simply because it does not use any network specific features. Most license agreements state that you may install the software on as many PC's as you like as long as the software cannot be used at more than one place at any one time (like a book). WLM is designed to satisfy that restriction, but also provides the capability to not restrict a particular application if necessary. WLM could be setup to run on a PC not connected to a LAN if you happen to like the drop down menu access better than Program Managers icons.

The menu supports up to eight buttons and up to 7 drop down menus. I'm not sure if there is a limit to the number of drop down menu items. The number of programs tracked in the dynamic array in memory is only limited by the memory of the system. You may place a separator bar between drop down menu items in order to group them. Menu items can be disabled easily within WLM.CFG (grayed out visibly in menu) for each PC individually, *or* from a centrally located single file.

A 'File Run' menu item allows users to run software not included in the menu, but also prevents them from running any software monitored by the menu program (listed in the license.txt file). You may also install programs using this command.

Allows automatic load of programs on startup (like Program Manager's startup group). You may

specify the application to load as minimized or maximized, with & without focus.

When you exit WLM.EXE any currently running applications are unloaded and you are given the option to save the current data for each application if necessary. You will *not* get a special window which pops up and confirms that you want to exit like Program Manager does (annoying).

Installation Instructions

Edit and replace the line SHELL=PROGMAN.EXE with SHELL=WLM.EXE in the SYSTEM.INI located in the windows directory with Notepad, edlin or any other ASCII editor.

Copy WLM.EXE and WLM.INI to the Windows directory (i.e. c:\windows).

Copy XTASK.DLL and VBRUN200.DLL to the Windows SYSTEM directory (usually C:\WINDOWS\SYSTEM). This is where all *.DLL files are normally located.

Create a read/write/sharable directory on the fileserver which is available to everyone at all times. Copy the license tracking file (LICENSE.TXT) to this directory. Edit the LicenseFile= statement in WLM.INI to reflect its location. All users will share/use this same file.

Copy WLM.CFG to a directory available to the PC node only - example: C:\WINDOWS. Edit the WLMFile= statement in WLM.INI to reflect its name and path.

Edit the LogFile= in WLM.INI to reflect the location in which you want the error log file to be written to. A good place for this is in the same directory in which LICENSE.TXT is written to (on the fileserver) so that you may review it easily from time to time from any PC. WLM will create the file if it does not exist.

Edit the RebootFile in WLM.INI to reflect the location in which you want the reboot track file to be located. This file is created as needed by WLM. The location or name of this file **MUST BE UNIQUE** for each PC. If the PC has a local hard disk then use a common name and write it somewhere like the Window's directory. If you are using a common directory on the hard disk then you must specify a *unique filename* for each PC.

Specific Information

The License Tracking File

The license tracking file (license.txt) stores the application name, the number of licences currently in use, and the maximum number of licences available. You turn off tracking of an application simply by setting maximum number of licenses to zero (0). WLM automatically recovers licenses when a PC is rebooted by keeping track of the applications loaded by each PC. File format for the license file is as follows:

Appl 1, Max Licenses, Licenses used, User Waiting, AppCode
Appl 2, ...

Appl: The name of the application including its extension.

Max Licenses: The maximum number of licenses to be allocated to this application. Set to zero (0) to disable tracking.

Licenses used: Normally set to zero (0) when first setup. You can open the file while in use and see how many licenses are being used later if you want.

User Waiting: Not used at this point. Set to zero for now.

AppCode: A unique number assigned by WLM and updated/corrected as necessary. Must be a multiple of 256 (Ex. 256, 512, 768, ...) Duplicates are not allowed.

Note that if you change the size of the license file (license.txt) while WLM is in use at other PC's they will receive an error when they close any application on their PC & be forced to exit Windows. However this will not cause any serious problems and the users will be able to resume normal use once Windows is reloaded. So don't modify the license file except after hours.

The Log File

Any errors which occur are written to a log file (WLMlog.txt) and will contain the date, time, identifier for the node (NODE= in WLM.CFG), and the error message. Usually the only statements which will appear here are denials to an application because the number of licenses allocated has been reached. *You can use WLMlog.txt to justify the purchase of additional copies of software since WLM does all of the usage tracking for you.* The second most frequent error to appear would be a notice that a certain application was unable to run due to an error in its setup (usually path, name, etc.), or if a user has rebooted a PC and licenses were recovered.

The Menu Configuration File

Use the NODE= to create a unique identifier for the PC in which you are running WLM locally. This allows you to identify from which PC errors came from when they are written to WLMlog.TXT

Use the TITLE= to specify a title for your menu.

Use SecureSoftwareUse= to enable or disable restrictions to software. If set to -1 (true) then the user will be denied access to an application when the maximum number of licenses is about to be exceeded (normal setup for most users). Set to 0 (false) when you want to give specific users (actually users of that PC) the ability to override the software restriction. When this happens the user is notified that they will be violating the license agreement and this violation is logged into WLMlog.TXT. This option was added for the case when you don't want to restrict a certain individual no matter what happens (like your boss).

The format for WLM.CFG is as follows:

AppName, MenuCaption, MenuLevel, Enabled, WState, LoadOnStartup, AppFilename, StartupDir

AppName - the name or description of the application to appear in the drop down list.

MenuCaption - Caption for menu (WLM uses first menu item only), use & for ALT-key access use "-" for a separator bar to follow the current menu item.

MenuLevel - 0 for buttons, 1-7 for drop down menus.

Enabled - 0 = false, -1 = true NOTE: cannot disable first menu item in any sub-menu, the program will ignore the request if you do.

WState: the window state you wish the application to be when loaded.

1,5,9 = normal w/ focus

2 = minimized w/ focus

3 = maximized w/ focus

4,8 = normal w/o focus

6,7 = minimized w/o focus

LoadOnStartup: -1 = load on startup, 0 = don't load on startup (typical)

AppFilename - the drive:path:filename for the application along with any parameters the application may use.

StartupDir - the drive:path you wish to set as the default before running the program. Most applications will use the default directory when opening and saving files.

Example: Word,&Applications,5,-1,1,0,C:\WORD20\WINWORD.EXE,F:\

Loads WINWORD.EXE, startup directory is F:\, menu caption is 'Applications, Menu level is 5, menu item enabled, window state is normal, application not loaded on startup.

The setup option under 'File' in WLM allows you to edit this information while in the menu, but any additions or deletions will not take effect until the menu is reloaded.

You may have multiple occurrences of the same application anywhere in the menu.

Known Problems

Pctools V7.0 installs COMMKBD.DRV into the SYSTEM.INI file. This will cause an error and should not be used.

If you change the size of the license file (license.txt) while WLM is in use at other PC's they will receive an error when they close any application on their PC & be forced to exit Windows. However this will not cause any serious problems and the users will be able to resume normal use once Windows is reloaded. So don't modify the license file except after hours.

Version/Revision History

- 1.0 First version installed on Novell LAN
- 1.1 Add application startup
- 2.0 Creation of menus from LICENSE.TXT
 - Load all menu items from LICENSE.TXT
 - add field: Indent index
 - use AppName for menu caption
 - add field: MenuName (for each app)
- 2.1 Added correction in KeyDown event for WLM form so that any ExitCode added to KeyCode would be stripped and not screw up the intended AppCode. This seems to make AutoSketch and others work just fine.
 - Added routine to ExitWLM to warn all applications that Windows is about to end & cause Windows to then end.
- 2.2 Changed WLM.INI to WLM.CFG
 - WLM.INI tells WLM where WLM.CFG & LICENSE.TXT are & allows them to be changed.
 - Startup form added w/ hourglass effect.
 - Windows directory detected & used to locate WLM.INI
 - Completed 3/23/93
- 2.3 Added startup caption & loading progress information to frmLoadWLM.
- 2.4 Added recovery/update of LicenseFile (LICENSE.TXT) from a reboot of a PC. 6/93
- 2.5 Removed restriction to list number of applications as first line in LICENSE.TXT 6/27/93.
- 2.6 Enabled Run command & checked for monitored application (& prevent monitored from running) 7/14/93. Tested and confirmed fact that WLM.CFG can have less menu items and in a different order than LICENSE.TXT.
- 3.0 Major revisions which removed the AppCode correspondence between the license file (license.txt) and the config file (wlm.cfg). Optimized for speed and reduction in errors.
- 3.1 Minor bug fixed. 12/4/93

File Descriptions

WLM.EXE The main program.
WLM.INI Initialization file read by WLM.EXE. Must be in Window's directory.
WLM.CFG ASCII file which contains setup information for the menus.
LICENSE.TXT ASCII file used by WLM.EXE to track license use for all instances of WLM.
WLMlog.TXT Created by WLM.EXE to log errors and restrictions to applications.
WLM.WRI Documentation for WLM.
XTASK.DLL DLL file used by WLM. Must be in Window's SYSTEM directory.
VBRUN200.DLL DLL file needed by any Visual Basic 2.0 program. Must be in Window's
 SYSTEM directory.
INSTALL.BAT An optional file usefull for installing WLM at multiple PC's. Needs to be edited
 to fit your needs.

Proposed Future Enhancements

Notify all users running an application that a user is waiting to access it.
Write a application use program which graphs or displays application use. Even compile
statistics on application use.

Disclaimer

***** USE THIS SOFTWARE AT YOUR OWN RISK *****
Be sure to test thoroughly in your environment.
No warrantees extended, no support promised.
Please report any problems back to the author.

Acknolodgements

Name: xTask.dll
Purpose: Monitoring termination of other tasks;
 Mapping between hTask and hInstance.
Version: 1.0
Date: 15 Nov 92
Requires: Windows 3.1
Author: Pieter Stam (CompuServe 100065,603), Pontis Consulting (U.K.)
Ownership: Public. Free usage & redistribution.

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Be sure to test thoroughly in your environment.
No warrantees extended, no support promised.
Please report any problems back to the author.