

License retrieval

The OpenLM License management tool is designed to identify consumed licenses that are sitting idle, and retrieve them to their license pools, thus improving license utilization and availability throughout the organization. There are a number of methods to obtain such optimization license utilization:

1. Manually

License administrators can monitor the OpenLM EasyAdmin web interface, and [manually return a license back to the license pool](#).

2. Suspend and Resume

OpenLM may automatically detect idle FlexLM licenses, remove them and suspend the application's process. This method is [referred to as "Suspend and Resume"](#).

3. Save and Close

OpenLM can automatically save and close idle MATLAB , Autodesk, Solidworks and ArcGIS sessions. It does so with the use of dedicated extensions, specifically implemented by OpenLM for each of these applications. This method is referred to as "Save and Close". This method is discussed on this current document.

4. Agent procedures

OpenLM 3.1 has added a new method for further enhancing idle license identification and retrieval. This is referred to as [retrieval through "Agent procedures"](#).

"Save and Close" features

The "Save and Close" method is only applicable to four specific licensed application vendors: ESRI (vendors of ArcGIS), Autodesk (vendors of AutoCAD), Solidworks and MathWorks (vendors of Matlab). These applications are named by convention "Extension Supported" applications.

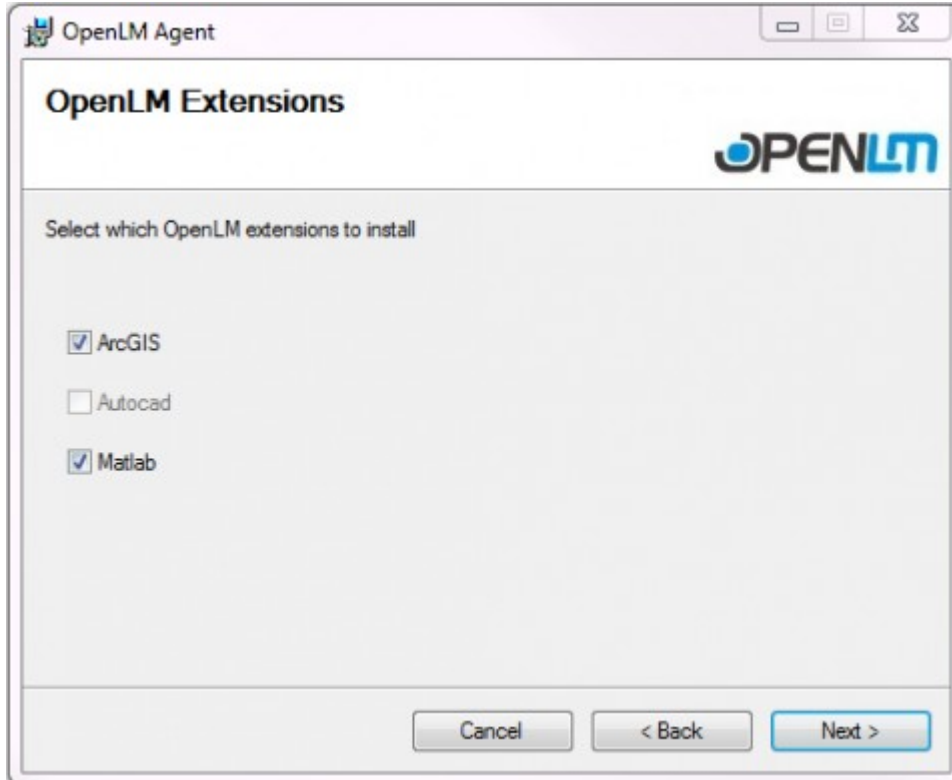
In the "Save and Close" method, an idle station is identified, the user's work is saved, and the application is actively shut down. The application is not just suspended, as opposed to the "Suspend and Resume" method. The location of automatic saving is configurable, so the

saved session does not necessarily override the current project. See the "Extension dedicated functions" section below.

OpenLM Agent installation

The "Save and close" method requires the installation of an OpenLM Agent on all end-user workstations to which license retrieval is to be applied.

1. Close the Extension enabled application (ArcGIS / MATLAB / Autodesk / Solidworks) on all end-user workstations.
2. If not previously done, Install the OpenLM Agent onto the workstation from [OpenLM Download](#). This can be done either manually, or deployed quietly via [msiexec](#) or [GPO](#).
3. When installing the OpenLM Agent manually, if an Extension Supported application (e.g. ArcGIS, Autocad, Matlab) is identified as installed on the computer, the OpenLM Extensions dialog window will open.



Choose to install the appropriate software extensions, thus enabling OpenLM to treat an

idle application in the Save and Close method.

4. Towards the end of the installation process, the Agent Configuration dialog window opens. Type in the OpenLM server with which the Agent is required to connect, and click Apply.

5. Similar options are available through the deployment flags when [installing the Agent silently](#).

6. The OpenLM Agent attaches an extension to each of the Extension enabled application (ArcGIS / MATLAB / Autodesk). It is good practice to ensure the extension has been properly installed. See the "Verify the OpenLM Extension Installation" Appendix below.

Configuring OpenLM to employ "Save and Close"

1. Open the OpenLM EasyAdmin web application (Windows Start Menu → All Programs → OpenLM → OpenLM EasyAdmin2).

2. Click EasyAdmin Start → Administration → Process/Features. The Process/Features window opens:

Process	Vendor	Enabled	License release enabled	Release method	Report rate	Minimum idle time (minutes)	Start releasing threshold...
ArcMap	ARCGIS	✓	✓	Extension	60	15	80.00
acad	adskflex	✓	✓	Suspension	60	15	80.00
ugraf	ugslmd	✓	✓	Procedure	60	15	80.00
ArcCatalog	ARCGIS	✓	✓	Extension	60	15	80.00

Feature

- Viewer
- Network
- Grid
- TIN
- Tracking
- ARC/INFO

3. Select an extension enabled application (ArcGIS / MATLAB / Autodesk), and click the 'Edit' button.

4. In the Edit process window, click the drop-down menu at the License release method. Select Extension.

Edit process

Process name: ArcMap

Description: ArcMap

Vendor Name: ARCGIS

Enabled

Enable license release functionality

Start releasing licenses after usage rate of (percent): 80

Idle Time License Release Threshold: Minimal idle time before license is released (minutes): 15

License release method: Extension

Save process activity

Idle Time Report Threshold: Report as idle after (minutes): 10

Advanced

System resource thresholds used to determine software inactivity

% Processor time: 2

IO Data operations/second: 2

% User usage: 2

OpenLM extension reports to OpenLM Agent (seconds): 60

Save

5. Check the 'Enabled' and the "Enable License release functionality" checkboxes.

6. Set the "Enable License release functionality" parameters. These parameters determine the policy for license retrieval, once they have been labeled Idle.

- Start releasing licenses after usage ... (Default: 80): Licenses will only become candidates for retrieval only if more than the defined percentage of licenses have been checked out.
- Idle time license release threshold (Default: 15 min): Idle licenses will be made available for retrieval if they had been idle for more than the defined period.

7. Expand the 'Advanced' panel, and set the system resource threshold parameters. These numbers are thresholds used for determining whether the monitored application is idle. The default values shown should not be changed unless explicitly instructed by OpenLM's support team. Changing these values inappropriately can harm the OpenLM system's performance.

- % Processor time (Default: 2): This is the CPU usage percentage threshold over which the application is considered active. The software will only be closed if its use of the workstation's processor time is lower than the percentage shown
- I/O Data operations / sec (Default: 2): Similarly, this is an I/O threshold over which the application is considered active. The software will only be closed if the number of disk operations per second is lower than the value shown.
- User usage (Default: 2): The processor utilization for user-mode processes on the workstation.

8. Click 'Save'.

That's it

your application license is set to be optimized by OpenLM in the "Save and Close" method.

- Idle applications will be suspended on the workstation. An appropriate notification will pop up on the workstation monitor.
- Users who had been waiting for licenses to become available will be notified, and
- Application activity may be resumed either via the suspension notification or via the OpenLM Agent interface "Recently closed documents" on the end-user's workstation.

For more information on these Agent notifications and capabilities [please refer to this document](#).

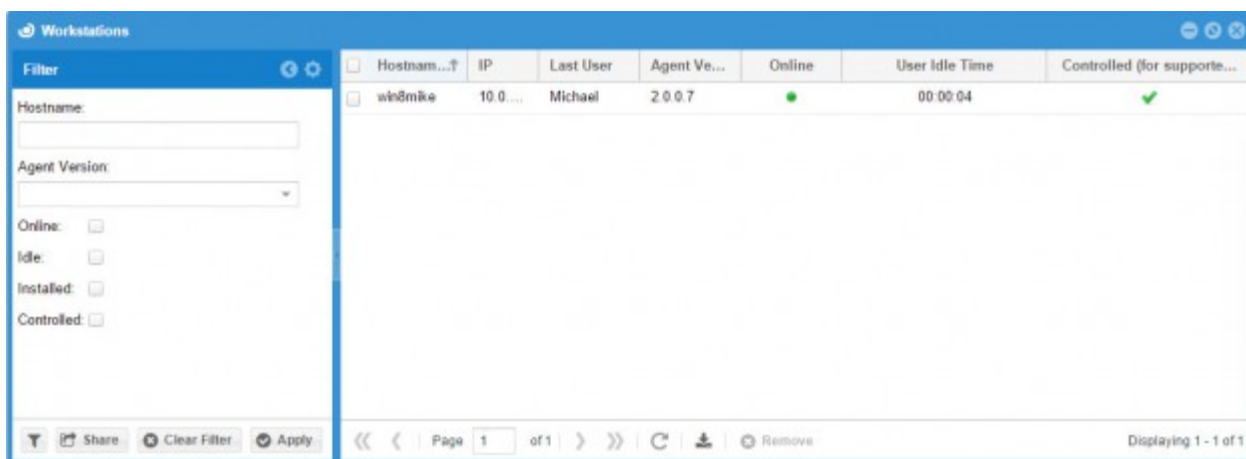
There are still some Extension dedicated configurations and capabilities that are worth mentioning here:

Controlled Workstations indications

Workstations are labeled as 'Controlled' when they fulfill two conditions:

1. An OpenLM Agent is installed and running on these stations
2. Both the License Server and the Agent report drawn licenses of Extension Supported applications.

Controlled workstations facilitate the Save and Close method of license retrieval. The indication of workstations as 'Controlled' is a green check mark on the 'Workstations' window in the EasyAdmin web application:



Extension dedicated functions

The Active Agent window's Extension Dedicated label contains several functions that are OpenLM extension specific, intended solely (at the time of this publication) for managing Matlab, ArcGIS and Autodesk applications. The Extension dedicated tab incorporates three bars entitled:

- Handling extensions
- Software items that will not be saved nor reported when closed
- List of Directories for which projects will not be saved when closed

Note: OpenLM recommends keeping the extension dedicated preferences at their default values, as this should be considered an advanced users' section.

In order to apply "Extensions dedicated" configuration, click OpenLM Start → Administration → Active Agent, and select the "Extension dedicated" tab.

Folder to save closed projects:

Specify the folder in which the automatically closed projects will be saved.

Overwrite existing projects

- Checked (Default): The same filename is used for project saving each time the application is detected as idle and closed.
- Unchecked: Each recurrence of an idle application closing event brings about the creation of a new copy of the saved project.

Show extension list at software startup (for ArcGIS only):

- Checked: The application's extension list is shown when the application is restarted after detected as idle and closed. This is useful for manually prompting users to confirm their usage of a certain extension.
- Unchecked (Default): The application's extension list is NOT shown when the application is restarted after detected as idle and closed.

Turn off licensed extensions at shutdown (for ArcGIS only):

- Checked (Default): Extensions that require licenses are closed together with the idle application. This requires the user to obtain a license for the extension when restarting the application.
- Unchecked: Extensions that require licenses are NOT closed together with the idle application.

Turn off custom extensions (for ArcGIS only):

- Checked (Default): Extensions that do NOT require licenses are closed together with the idle application. This requires the user to obtain a license for the extension when restarting the application.
- Unchecked: Extensions that do NOT require licenses are NOT closed together with the idle application.

Application's behavior when extension passes usage threshold (for ArcGIS only)

There are two methods of operation to deal with an event in which an application was NOT

compelled to close according to the Active Agent's preferences, but a licensed extension that is embedded in that application WAS compelled to close. These two optional operations will either turning off the extension, or shutting down the application altogether.

Solve License Manager Errors

Situations may arise when a license is unavailable for use and unknown to the System Administrator. Selecting this option will provide the chance to find the license and return it to the pool of available licenses for use. This is only applicable for Extension Supported applications like, AutoDesk, ArcGIS, and MATLAB.

Shut down application (time set)

This is a two-step operation. Step one is to check the box to shut down any working applications. Step two, is to set the time as to when any working application are automatically shut down.

Hide "Set ArcGIS License Level" from agents

Checking this box will prevent agents from adjusting ArcGIS license levels.

Software items that will not be saved nor reported when closed

This heading lists a number of objects that would not be saved when the application is closed; e.g.: ArcCatalog.exe is a file browser which holds no substantial data at its own right, and therefore is not saved. Click 'Add' to submit more items to the list.

List of Directories for which projects will not be saved when closed

This heading lists directories onto which no changes would be made upon application automatic closure. This is intended for projects that should keep the same static information every time they are started. Click 'Add' to submit more items to the list.

Need help ?

If license retrieval via Save and Close does not work, please refer to This [trouble shoot guide](#). Please also feel free to contact our support team at support@openlm.com

Appendix A: Verify the OpenLM Extension Installation

ESRI Desktop ArcGIS: Click Customize → SelectExtensions. Confirm that OpenLM Arcgis Extension appears in the Extensions list. The Save and Close mode is supported for any Autodesk software application. In Autocad Map 3D for example, type in the “OLM” command at the bottom of the AutoCAD window. If the OpenLM Agent extension was installed, the End User should receive a message such as depicted below:

If the Extension is not installed, an Error message should appear, stating that the “OLM” command is not recognized.