

## Introduction

OpenLM App Manager provides a solution for intervening in excessive license consumption, and avoiding unplanned expenditure on licenses or breaching license compliance.

The OpenLM App Manager serves as a shell for vendor license managers. It provides capabilities that are not available through vendor license management. It is designed with the intention of returning control back to software users.

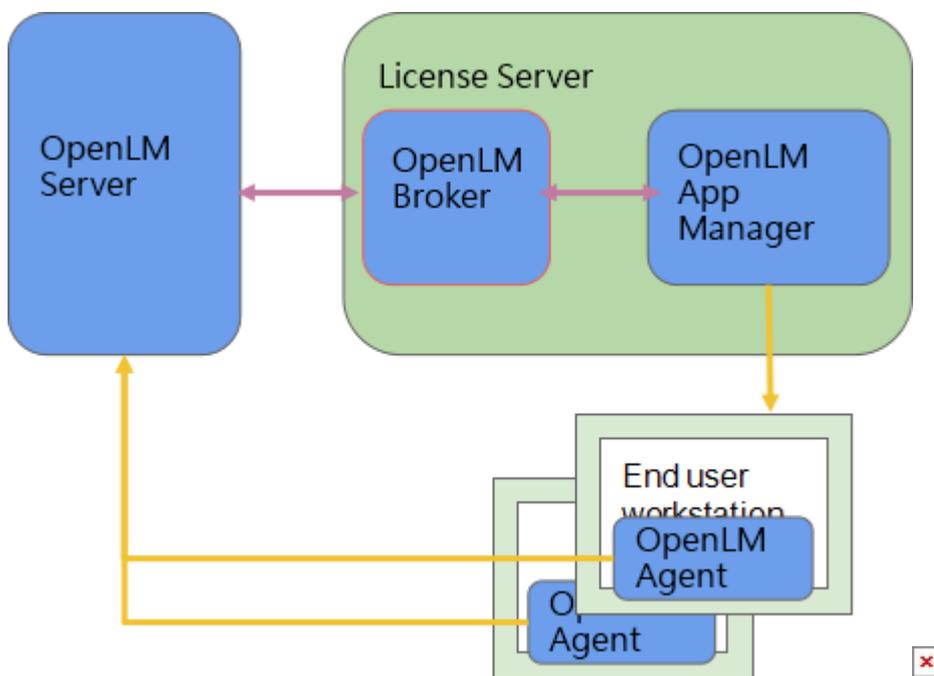


Figure 1: OpenLM App Manager workflow.

The OpenLM's comprehensive license management solution is comprised of the following four components: OpenLM Agent, OpenLM App Manager, OpenLM Broker and OpenLM Server.

- The OpenLM Agent is a lightweight software component that should be installed on end user workstations. The OpenLM Agent is responsible for the following:
  1. Monitoring processes running on workstations
  2. Catching and reporting software launch events
  3. Intervening in the execution of specific processes on the workstation
- The OpenLM App Manager is a Java application that acts as a hub for all OpenLM

Agents. It is recommended that App Manager be installed on the same machine as the license server (e.g. FlexLM) and OpenLM Broker. Alternative installations are possible but require additional configuration. The OpenLM App Manager:

4. Obtains information from the OpenLM Agent installations regarding active processes and software launches.
  5. Enables the Agents to launch software according to the defined configuration.
- The OpenLM Broker is an optional (but strongly recommended) Java software module that interacts directly with the license manager server in order to get the current license server status. It is a Java component that can run on any Java-supported platform.
  - The OpenLM Server is the main OpenLM component. It provides the following:
    1. It is an administrative interface used to configure the OpenLM License Manager
    2. It maintains license usage information in a database
    3. Provides a platform for reporting license usage

This Document Includes:

- [OpenLM App Manager Installation \(Linux, Unix and Windows\)](#)
- [Configuration for OpenLM App Manager](#)

All components necessary for installation of OpenLM are available for download in the [Downloads](#) section on the OpenLM website. OpenLM App Manager requires a license file that can be obtained from OpenLM Sales. Instructions for the license file are included in the installation instructions below. Please consult [the general installation guide](#) for more information on installing the OpenLM system.

## OpenLM App Manager Installation

The OpenLM App Manager is implemented in Java, and may be installed on any machine that runs a compatible operating system. Both Windows and Unix / Linux installations are covered in this section along with license installation.

- [Unix / Linux Installation](#)
- [Windows Installation](#)
- [Installing the License File](#)

## Unix / Linux Installation

OpenLM Linux package is delivered as a zip file (e.g. **openlm-app-manager-#.#.#-bin.zip**). Installation process requires extraction of files and additional configuration.

1. Make sure that you have Java installed on the machine - currently it's Java version 8.
2. Download ZIP package of App Manager for Linux and unpack it to a convenient location.

**Note:** Linux system settings can be configured by revising **openlm-app-manager.properties** configuration file (located in folder where OpenLM App Manager is

You also have to define the OpenLM server admin user and password if you are using Admin login for OpenLM User Interface.

3. It is mandatory to define OpenLM server hostname in **Openlm.server.host** in the **openlm-app-manager.properties** configuration

For a proper OpenLM Server connection make sure that App Manager is always running.

It is also possible to create scripts based on **run.sh** or add App Manager's script for automatic execution.

4. Create license folder and put license file in this folder. (In order to obtain license file follow [these instructions](#)).
5. Grant **run.sh** executable attribute by command **chmod +x run.sh**.
6. Execute **run.sh** to start App Manager.
7. To check if installation completed successfully:
  - a) App Manager has to be added to OpenLM Server And Broker(potentially agent as well) configuration. When it's fully functional, it is displayed in User Interface UI:  
Start->Administration->App Manager.
  - b) Use **lmstat.sh** script. Broker should be able to run it and retrieve output XML with status="ok"

## Windows Installation

OpenLM provides an automated installer for OpenLM App Manager.

1. Double-click the OpenLM App Manager installation file icon to launch the installation wizard (see Figure 2).

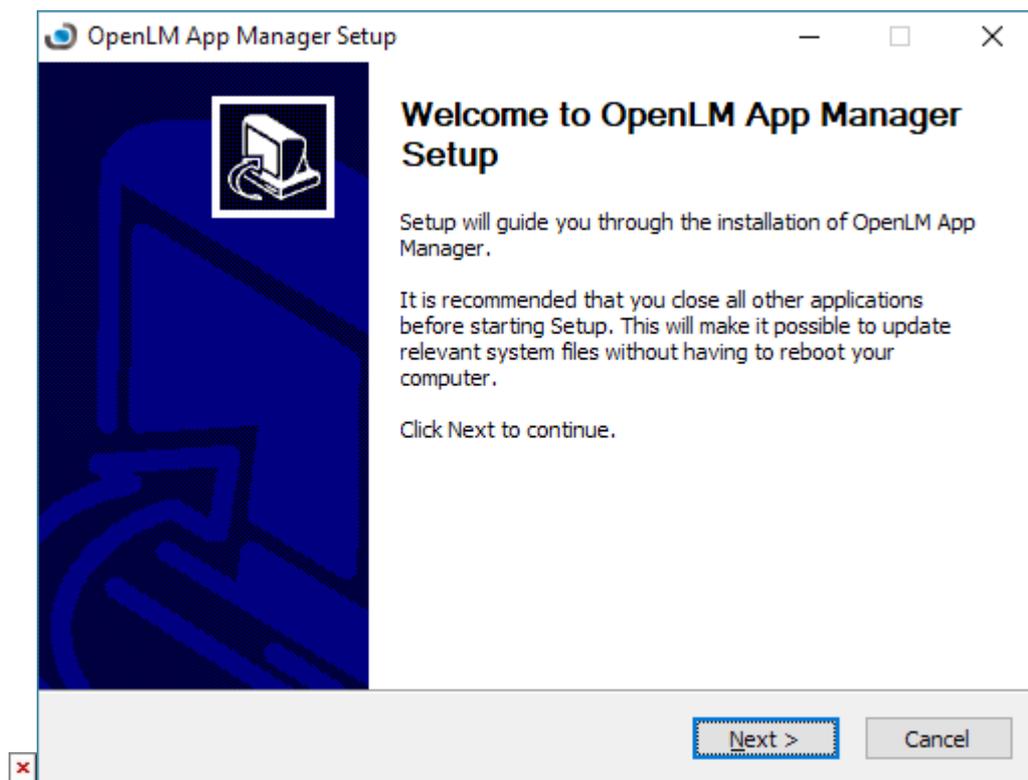
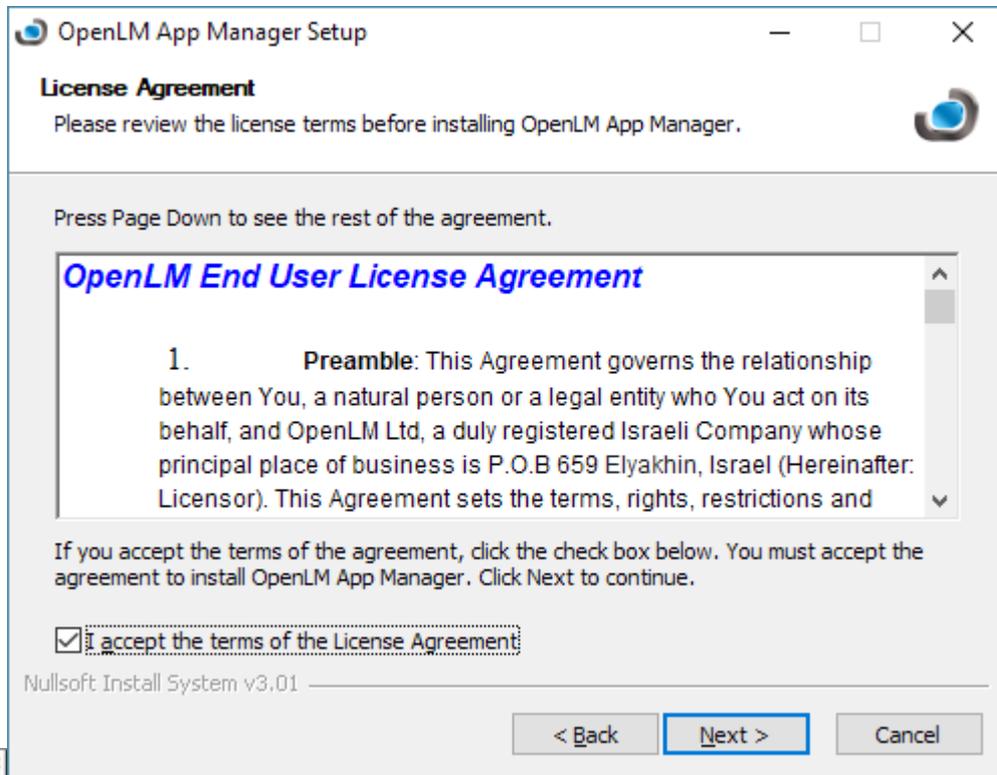


Figure 2: The App Manager Setup wizard.

2. Click [Next] button and the License agreement screen will appear (see Figure 3).
3. Read the license agreement, then check the "I Accept the Terms of the License Agreement" box.



4. Figure 3: The License Agreement screen.

4. Click [Next] to advance to the Service Configuration screen (see Figure 4).

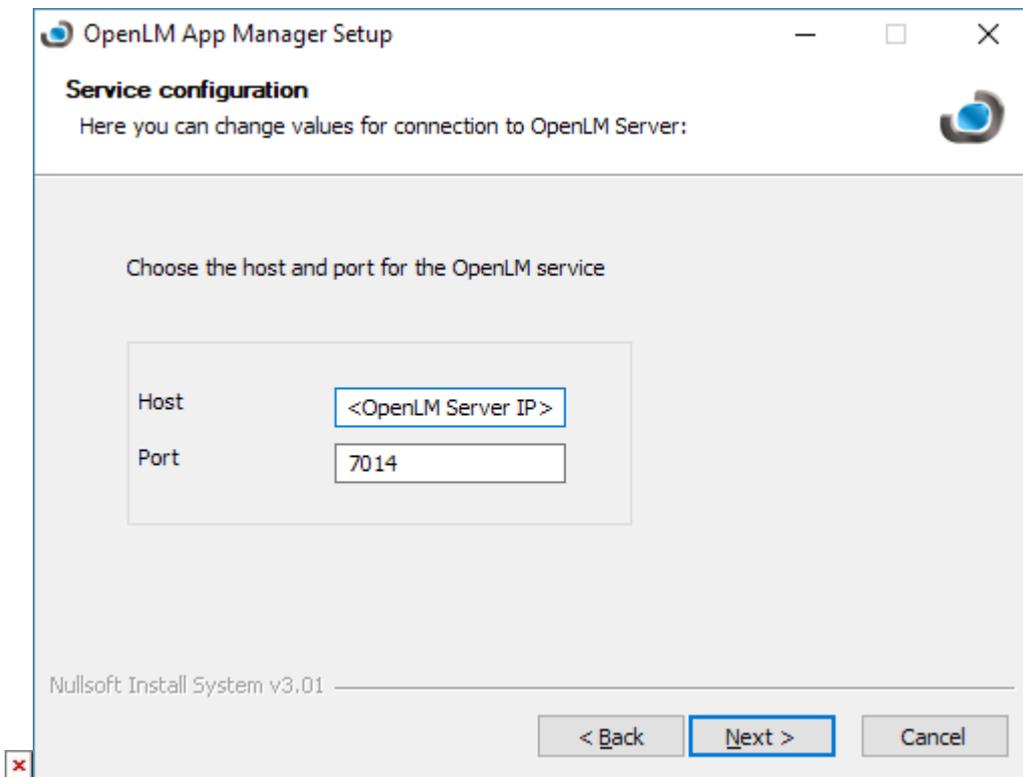


Figure 4: The Service Configuration screen.

5. Check the Host (default: localhost) and Port (default: 7014) to be sure they reflect your installation. Using the actual server name or IP is recommended.
6. Click [Next] to accept the configuration and advance to the Install Location screen.

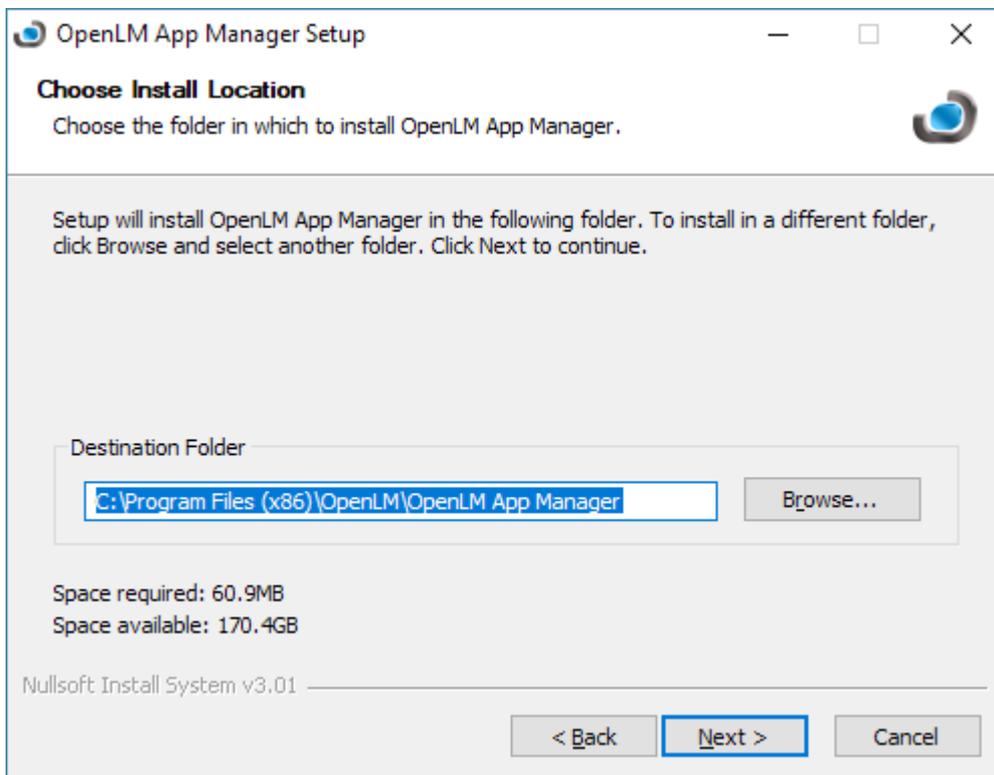


Figure 5: The Choose Install Location screen.

7. Check the installation path. The default is: C:\Program Files (86x)\OpenLM\OpenLM App Manager.
8. Click the [Next] button to advance to the Choose Components screen (see Figure 6).

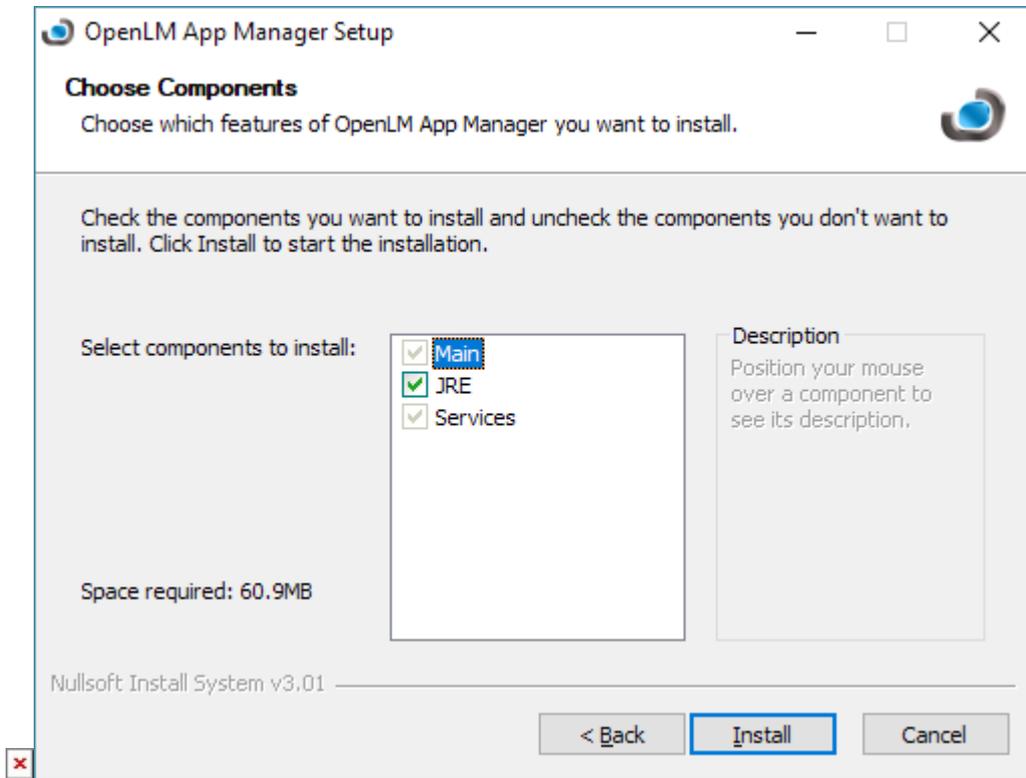


Figure 6: The Choose Components screen.

9. [Optional] All options on the Choose Components screen will be checked by default. If you prefer to use another Java installation, uncheck the JRE box. Proceeding with the box unchecked will produce a warning when the installation continues (see Figure 7). Be sure to have a compatible JRE installation running and consult the [OpenLM Broker Configuration](#) document for running installations with a common Java install.

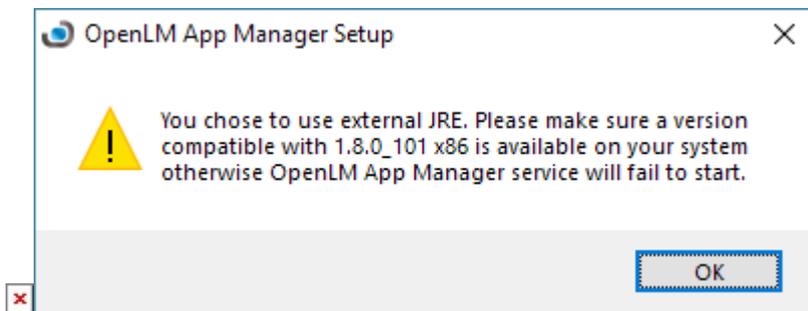


Figure 7: The warning screen for skipping JRE installation.

10. Click [Install] to begin the installation. A progress screen will appear (see Figure 8).

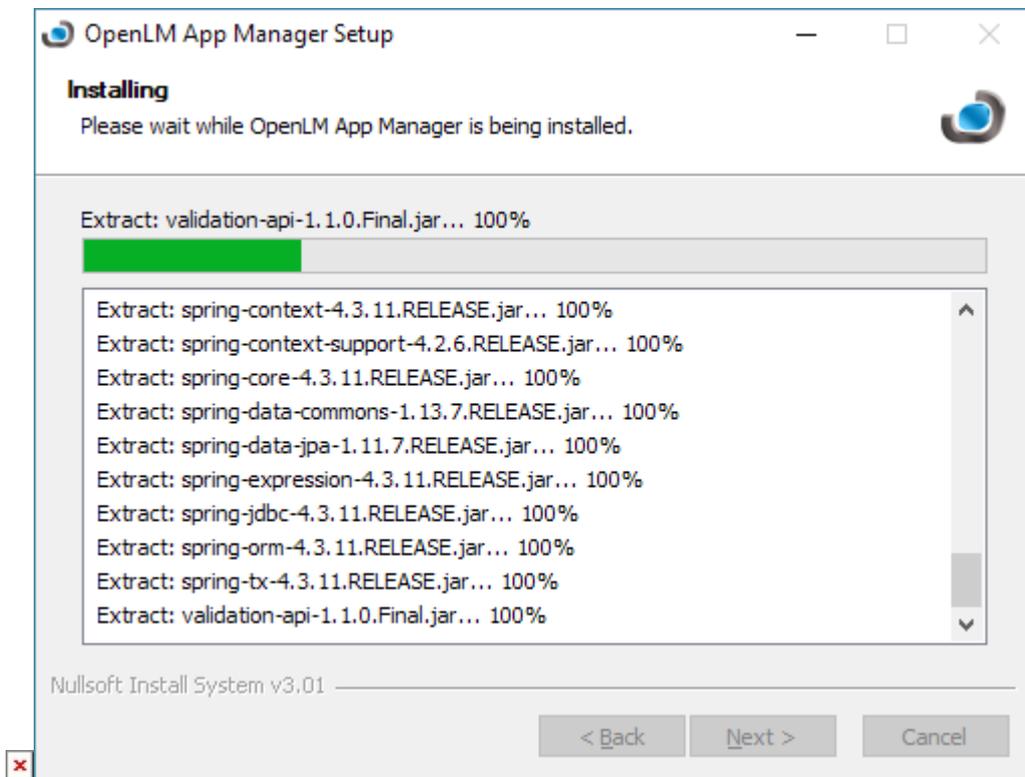


Figure 8: The installation progress screen.

11. After installation is complete, a success screen will appear (see Figure 9).

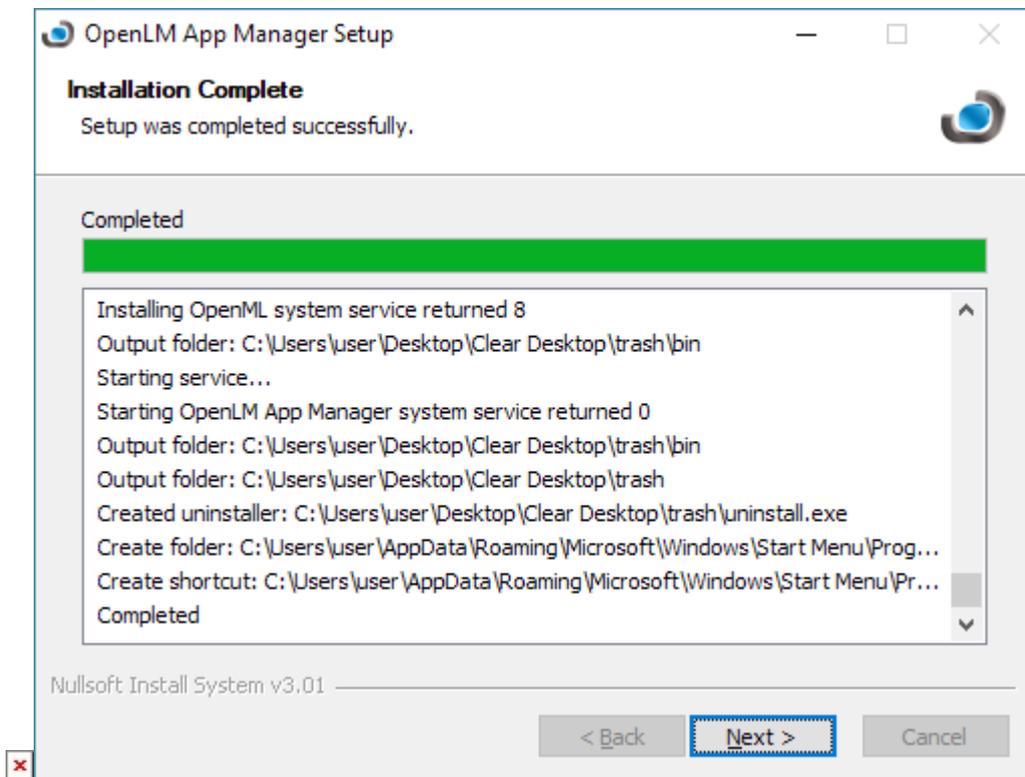


Figure 9: Installation success screen.

12. Click [Next] to advance to the completion screen.

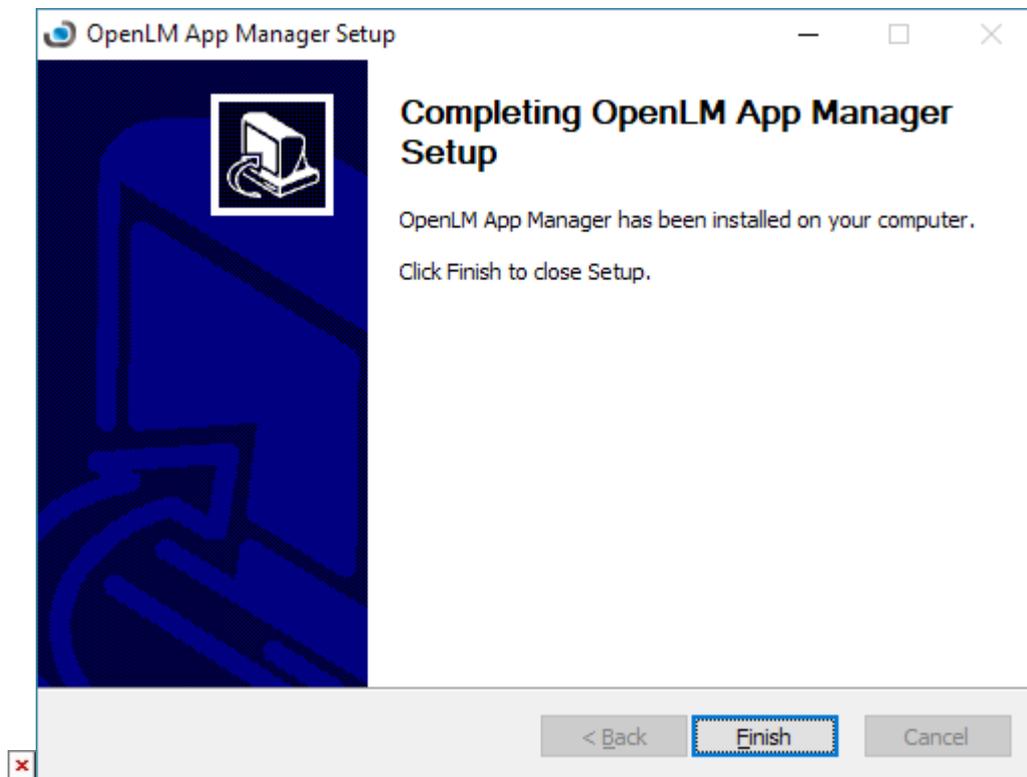


Figure 10: The completion screen.

13. Click [Finish] to close the wizard and complete the installation.
14. Make sure the OpenLM App Manager service is running (e.g., check in the Windows Services list or Task Manager for status).
15. Edit the `openlm-app-manager.properties` file (by default located in `C:\Program Files (x86)\OpenLM\OpenLM App Manager`) to connect to the OpenLM Server.
16. Restart OpenLM App Manager (e.g., again using Windows Services list or Task Manager) to make the changes live after the file is edited.

## Installing the License File

A license file must be procured and installed to use OpenLM App Manager functionality. Use the following steps to obtain and install the license.

1. Contact OpenLM sales to procure the license file ([sales@openlm.com](mailto:sales@openlm.com)). You will need to provide the machine name or IP and MAC address for the machine where App Manager will be installed.

2. Download the file (e.g., <UserName>\_AppManager.lic) to a convenient folder (e.g., the Download folder).
3. Copy the license file to the OpenLM App Manager 'license' folder (e.g., C:\Program Files (x86)\OpenLM\OpenLM App Manager\license).
4. Restart OpenLM App Manager.

At this point installation is complete. Additional configuration of other OpenLM components will be necessary to complete the setup.

## Component Configuration for OpenLM App Manager

App manager requires configuration in various components including OpenLM Server, OpenLM Broker and OpenLM Agent. These steps are covered in separate sections below.

- [OpenLM Server Configuration for App Manager](#)
- [OpenLM Broker Configuration for App Manager](#)
- [OpenLM Agent Configuration for App Manager](#)

## OpenLM Server Configuration for App Manager

OpenLM Server needs to be configured to recognize OpenLM App Manager. This is done through the OpenLM Server Option.

1. Launch the OpenLM Server Options tool ([Start] > [OpenLM] > [Configure OpenLM Server]).
2. Choose OpenLM App Manager for the license manager Type from the drop list.
3. Enter a descriptive name for the license manager in the Description field (e.g. openlm\_app\_manager).
4. Choose the Timezone for the location of OpenLM App Manager from the drop list.
5. Enter the OpenLM App Manager's server name (IP address or license server name) in the Hostname field.
6. Enter the OpenLM App Manager's port number in the Port field (e.g., default 27080). See Figure 11 for a completed setup screen.



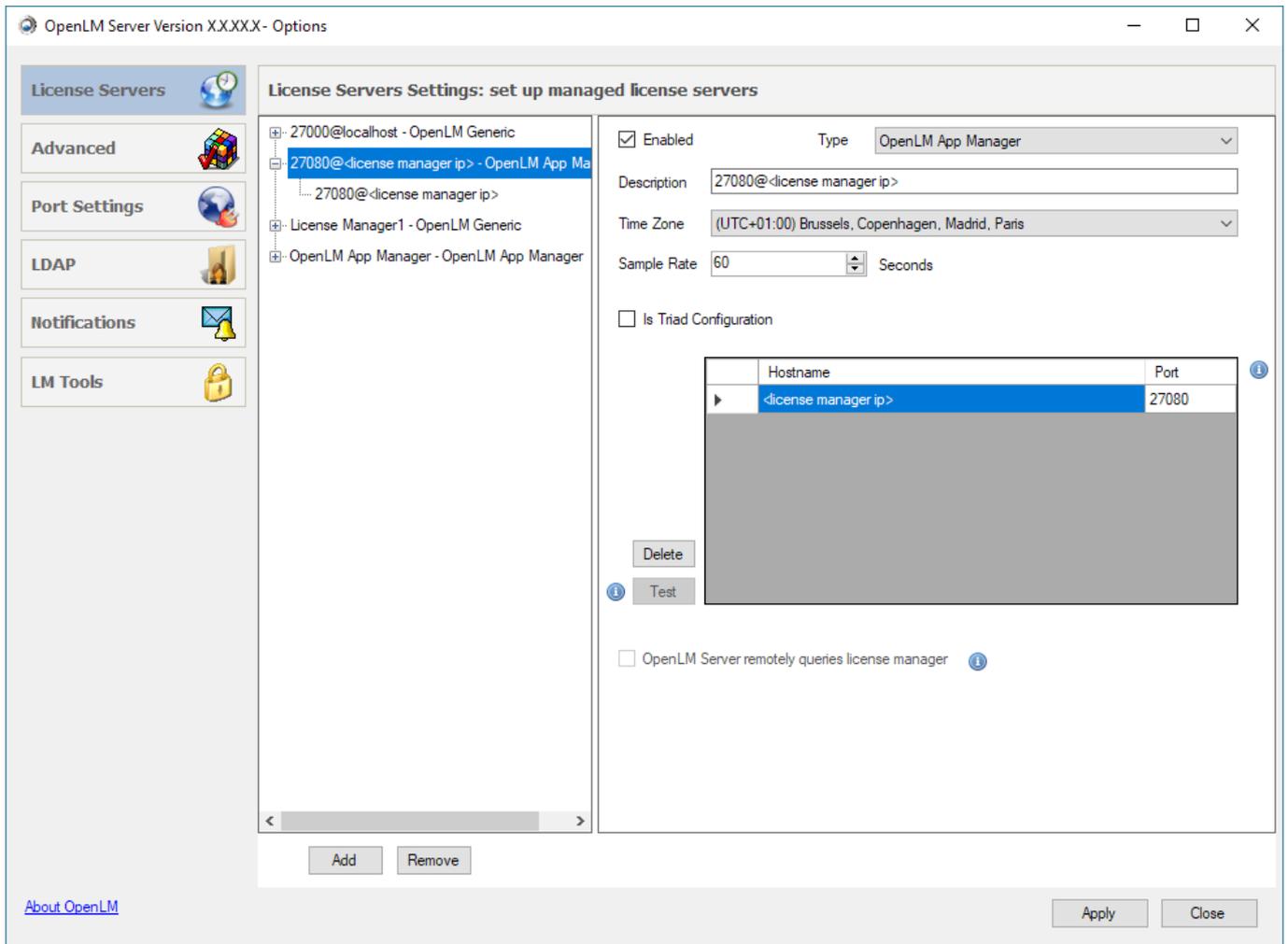


Figure 11: The OpenLM Server Options screen.

7. Click the [Apply] button to accept the changes. This will open the Restart Service screen prompt.
8. Click on the [Restart Now...] button to make the changes in configuration live.
9. Click the [Close] button to exit the OpenLM Server Options screen.

## OpenLM Broker Configuration for App Manager

The OpenLM Broker facilitates the connection to the OpenLM Server. OpenLM Broker to query the OpenLM App Manager.

It is recommended that OpenLM Broker be installed on the same machine as the OpenLM

App Manager. [NOTE: for other installation configurations please contact OpenLM support ([support@openlm.com](mailto:support@openlm.com)).]

The Detect feature can be used to automatically detect license manager information and simplify OpenLM Broker configuration. The function will add information for new ports (e.g., commands and paths) depending on what is detected. For more information about configuration of OpenLM Broker, please see the dedicated [OpenLM Broker documentation](#).

1. Open the OpenLM Broker Configuration tool. Choose [Start] > [OpenLM] > [OpenLM Broker Configuration Tool].
2. Click [Detect] on the bottom of the OpenLM Broker Configuration Tool screen. This will populate the Command options with detected configurations or it will use defaults. The App Manager license server and additional nodes will be added to the navigation tree in the navigation panel.
3. Review all the added configuration items to be sure the information has been added correctly according to your installation. These items include the App Manager Host Name \ IP (License Server node), Port number and License Manager Type (Port node), command line paths to 'status' (Commands > Status node) and 'data\_inquiry' (Commands > data\_inquiry node), and log file path (Log Files node). See the defaults listed in Table 1.

Item	Default
Hostname \ IP	localhost [NOTE: server names default to 'localhost' but using the actual server name or IP is recommended.]
Port Number	27080
License Server Type	OpenLM App Manager
Status	C:\Program Files (x86)\OpenLM\OpenLM App Manager\lmstat.bat. [NOTE: Linux configurations should point to the lmstat.sh file.]
Data_Inquiry	C:\Program Files (x86)\OpenLM\OpenLM App Manager\lmstat.bat. [NOTE: Linux configurations should point to the lmstat.sh file.]
Log File	C:\ProgramData\OpenLM\OpenLM App Manager\logs\lm-log.log

Table 1: Default values for OpenLM App Manager in OpenLM Broker.

4. Click the [Apply] button to commit the changes. This will call a Save confirmation screen.
5. Click [OK] to close the confirmation.
6. Click the [Restart Broker] button to restart the Broker and make the changes live. A Restart Service confirmation screen will appear.
7. Click [OK] to close the confirmation.
8. Click [Exit] to close the OpenLM Broker Configuration Tool screen. A confirmation screen will appear asking to confirm exiting the tool.
9. Click [Yes] to confirm, close the confirmation and exit the tool.

## OpenLM Agent Configuration for App Manager

To enable OpenLM Agent to intervene in software license distribution with App Manager, it must be configured in the OpenLM Agent Configuration interface. For additional information about configuring OpenLM Agent, please see [OpenLM Agent End User Interface](#).

1. Open the OpenLM Agent Configuration screen by choosing [Show Hidden Icons] > [right click - OpenLM Agent icon] > [OpenLM Agent Configuration] (see Figure 12). The Agent Configuration screen will open displaying the General tab (see Figure 13).

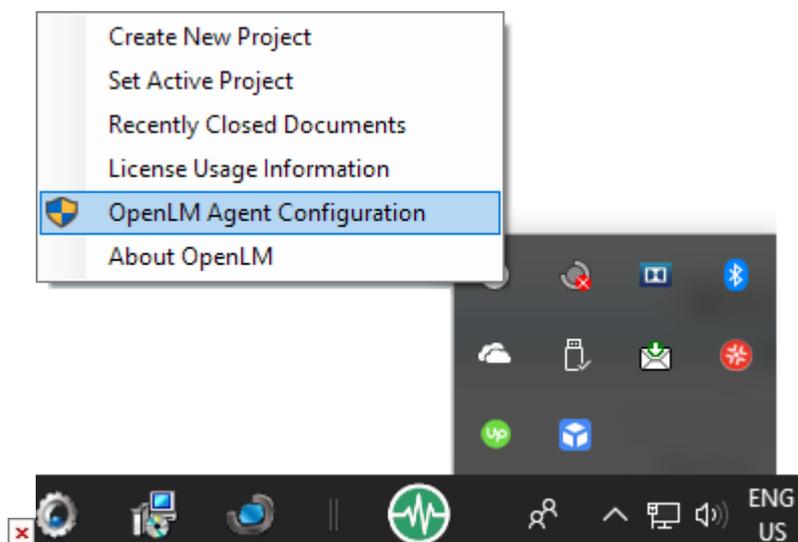


Figure 12: Choosing OpenLM Agent Configuration.

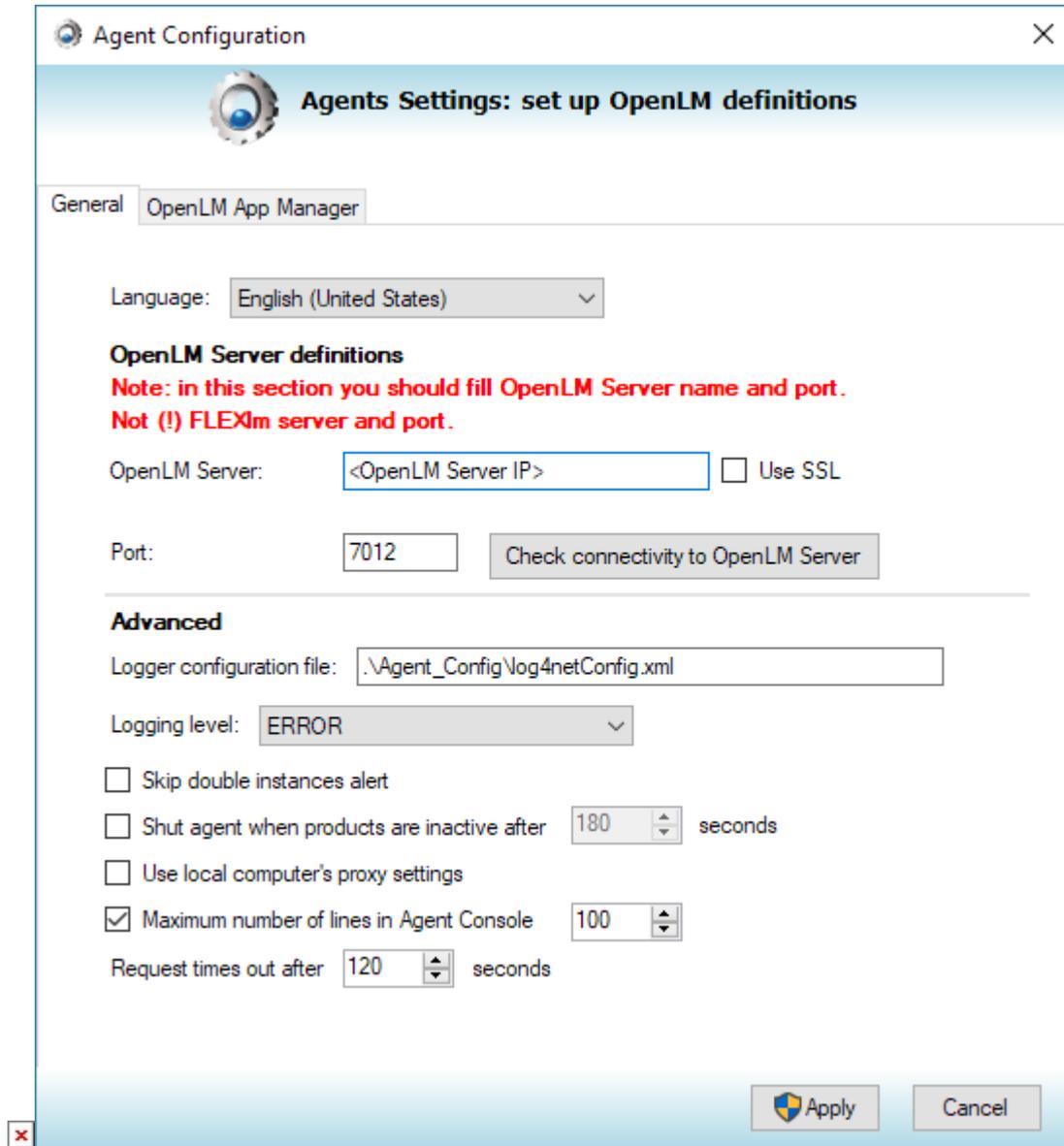


Figure 13: The Agent Configuration screen.

2. Click the OpenLM App Management tab (see Figure 14). Defaults will be displayed as per Table 2.

Item	Default
Enable (checkbox)	Checked
OpenLM License Manager Server	localhost

Port 27080

Table 2: Default values for OpenLM App Manager in OpenLM Agent Configuration.

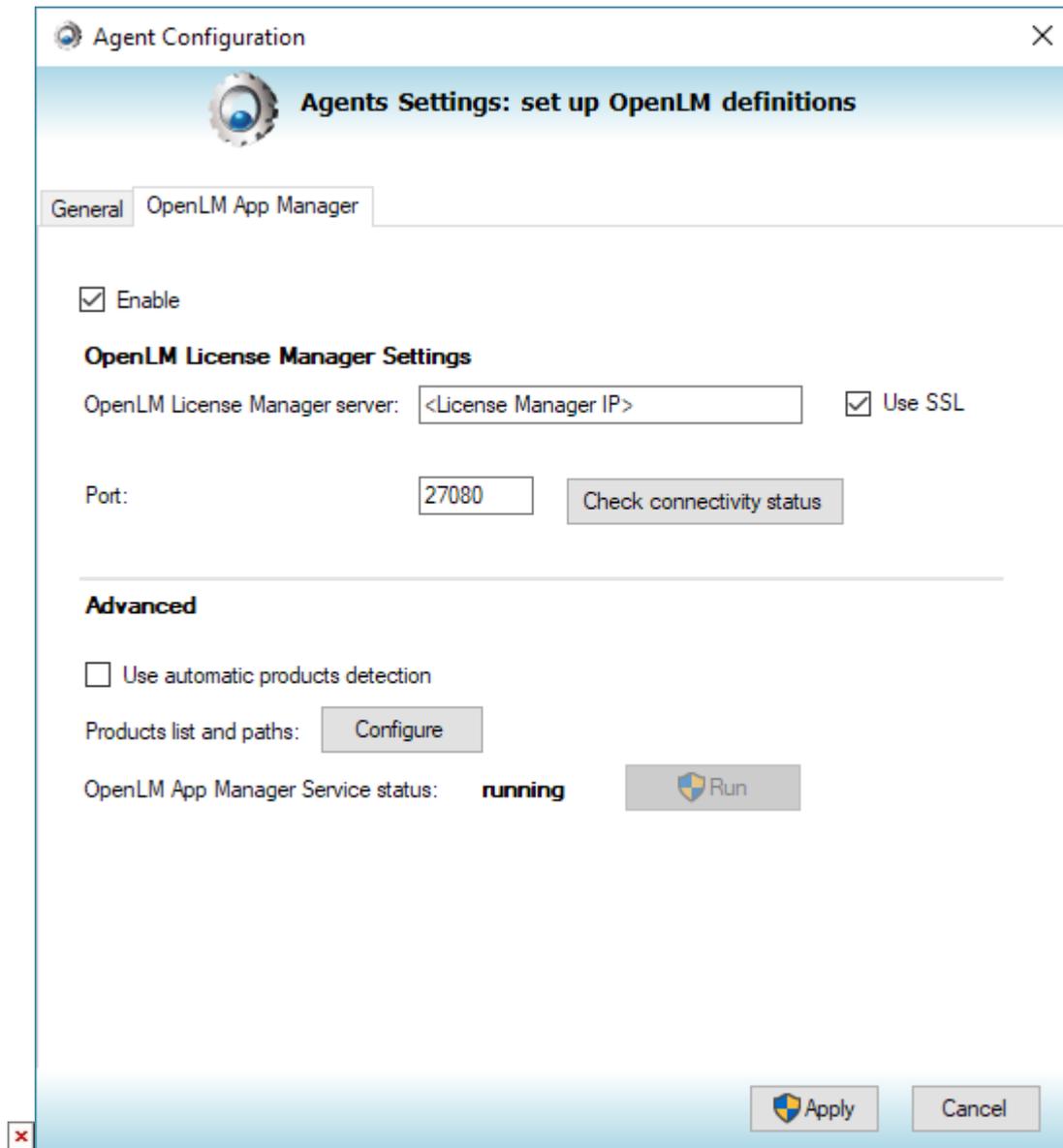


Figure 14: The OpenLM Agent Configuration screen displaying the App Manager tab.

3. [Recommended] Change the License Manager server to the server name or IP.
4. Check the connectivity to the OpenLM License Manager by clicking the [Check Connectivity Status] button. This should return a success screen. If it returns a failure, check to see that all the services are running, confirm the configuration for Port and

License Server and repeat this step. If the problem cannot be located, contact OpenLM support ([support@openlm.com](mailto:support@openlm.com)).

5. Click the [Apply] button. This will accept the changes and close the Agent Configuration screen.

At this point configuration is complete. Additional information on monitoring licenses can be found in the [EasyAdmin Web App](#) documentation.