

Orcina Licence Monitor

1 Introduction

The Orcina Licence Monitor (OLM) suite of programs enables network administrators to monitor and log the usage of licensed Orcina programs on a network. In addition it allows users of these programs to determine who is using Orcina program licences.

The Orcina Licence Monitor suite consists of:

1. The licensed Orcina software: OrcaFlex and OrcaWave. We refer to these programs as *client* programs.
2. The OLM server. This is run as a service on a single machine on the network. Each client program connects to the OLM server. The OLM server keeps track of each running client and notifies the OLM viewer of changes, and also keeps a log of client connections.
3. The OLM viewer. The OLM viewer communicates with the OLM server and displays information on each client program connected to the OLM server. The viewer can be run on any workstation on the network and multiple copies may be running at any instant. The OLM viewer displays this information in two lists, a *Details* list and a *Summary* list. The details list shows information on every connected OLM client sorted by provider (dongle ID or FlexNet host). The summary list has information grouped by Orcina client program or module, and provider.

2 Hardware Requirements

OLM server and OLM viewer require Windows 10 or later.

All the programs which make up the OLM suite (server, viewer and clients) must be connected over a TCP/IP network.

3 Installation

To install the Orcina Licence Monitor you must complete the following steps:

- Install and start the OLM server service.
- Install the OLM viewer on any computers that need to use it.
- Configure the `OLMServerAddress` setting in the registry on each computer that runs a client program on which the OLM viewer will not be installed.

The installer program, OLM.msi, is used to install the OLM server and viewer components. The installer asks you to choose which component to install and will guide you through the configuration required. There is just one setting you will need to define - the hostname or IP address of the machine running the OLM server.

When you start the installer you are first prompted for an installation folder, by default this is `%ProgramFiles%\Orcina\Licence Monitor` where `%ProgramFiles%` is the programs folder on your machine – often this is `C:\Program Files (x86)\`.

3.1 OLM server Installation and Configuration

The OLM server needs to be installed on one computer on the network, the server runs as a service with the name 'OrcinaLicenceMonitorService'. The installer copies the executable (called `OLMServer.exe`) to the installation folder and sets up and starts the service.

By default the OLM server writes log files to the Common AppData folder (this is normally `c:\ProgramData\` in Windows Vista and later), under `\Orcina\Orcina Licence Monitor\`. An alternative log path can be specified in the registry using the 'LogPath' setting (no sub-directories will be added to this path). If the log path cannot be created or accessed then the Windows temporary directory is used (with the sub-directories `\Orcina\Orcina Licence Monitor\`).

A new log file is created when it reaches a certain size, by default this is 1000kb but this value can be changed with the 'MaxLogFileSizeKb' registry value. The log filename will be in the format 'OLM Licence Use dd mmm yyyy.log'

The default TCP/IP port number is 53413, you can modify this if required by setting the 'port' value in the registry.

If values already exist in the registry (from a previous installation) then these will be retained. Values for log path and port are stored in the registry under the following key:

```
Key: HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\  
    OrcinaLicenceMonitorService  
Name: Port Type: REG_DWORD  
Name: LogPath Type: REG_SZ  
Name: MaxLogFileSizeKb Type: REG_DWORD
```

Changes to these registry settings only take effect once the OLM server has been restarted.

3.2 OLM viewer Installation and Configuration

The OLM viewer program can be installed on any computer that is on the same TCP/IP network as the OLM server. The installer copies the OLM viewer executable (called `OLMViewer.exe`) to the installation directory and prompts for the network address used by the OLM server. The OLM viewer is started from the Windows Start menu: Programs | Orcina Software | Licence Monitor.

The installer prompts for a host name or IP address of the OLM server. If a registry setting already exists for this (from a previous installation) then this value will be displayed otherwise the box will be blank. A value must be entered, as there is no default. The default port number is 53413, this can be changed in the registry setting below. The OLM viewer settings are in the registry under the following key:

```
Key: HKEY_LOCAL_MACHINE\Software\Orcina  
Name: OLMServerAddress Type: REG_SZ  
Name: OLMPort Type: REG_DWORD
```

On a 64 bit OS, the registry redirector means that the key is:

```
Key: HKEY_LOCAL_MACHINE\Software\Wow6432Node\Orcina
```

Changes to these settings only take effect once the OLM viewer has been restarted.

3.3 Client Configuration

Client programs (e.g. OrcaFlex, OrcaWave, OrcaLay and OrcaBend) share the same registry settings as the OLM viewer. If the OLM viewer is not going to be installed on a client machine then

the registry settings above need to be set manually. The `OLMServerAddress` needs to be set to the OLM server network address (e.g. myserver or 123.456.7.89). The `OLMPort` setting need only be set if a value other than 53413 is being used.

4 Uninstalling OLM

The OLM server and viewer programs can be uninstalled from the Windows Add/Remove Programs Wizard available from the Control Panel. When the OLM server is uninstalled, any log files in the location specified in the Registry will not be automatically removed.

5 OLM Operation

5.1 Client program / OLM server interaction

When an Orcina client program is started it attempts to find a licence provider with available licences.

If the client successfully claims an available licence it opens a connection to the OLM server. The OLM server then notifies any connected OLM viewers of the changes to its client list.

For licences provided by a dongle only, if the client was able to find a dongle but was unable to find an available licence then it briefly connects to the OLM server to report this. The OLM server logs this as a *No Licence Available* event.

When a client program closes and releases its claimed licences the OLM server logs this as a *Disconnected* event, with a start and end time and a connection duration, and notifies any connected OLM viewers.

All of the events described above are logged to a file by the OLM server.

If the server is stopped and restarted, or there is a network problem preventing access to the OLM server, then the clients and OLM viewers will continue to try and reconnect to the OLM server.

5.2 Log File

The log files, `OLM Licence Use dd mmm yyyy.log`, is a tab delimited text file where `dd mmm yyyy` is the date the file was opened. Each entry in the log file records the same client and module details as displayed in the OLM viewer's detail view. In addition there is an entry id number, an event type and a connection start, end and duration (seconds). This time period is the time a licence was in use by the Orcina application.

The event type is either:

Disconnected (the client application has closed and disconnected from the OLM server – returning its licence) or

No Licence Available. – The client application could not obtain an available licence from the dongle.

The log file is continually appended until the specified maximum size is reached (see the 'OLM server Installation and Configuration' section) then a new log file is started, with a different date stamp. If there happens to be a log file with the same date stamp present, then the new file will be post-fixed with an index value (eg. `"OLM Licence Use dd mmm yyyy (2).log"`).