

# Reserved Licenses in OpenLM

## Introduction

FLEXlm License reservation is done in the Options File where the license administrator isolates licenses for a user or a group.

Reserving a license is a significant action and should not be done carelessly. By changing a license to 'reserved', the license administrator actually takes an expensive, floating license and converts it to a less expensive node-locked license. Locking the license as 'reserved' blocks it so that only the designated user(s) have access to it.

Utilization of reserved license designations should be done with care because of this limitation. Each minute that a reserved license is not in use is a minute where a license might otherwise be utilized by other users in the network.

## How FLEXlm Displays Reserved Licenses

The FLEXlm license reservations (for users or groups) declared in the Options File displays the following allocation while the reserved license is *not* in use:

**Users of Viewer: (Total of 5 licenses issued; Total of 1 license in use)**

**"Viewer" v10.1, vendor: ARCGIS**

**floating license**

**1 RESERVATION for USER rachel (10.0.0.145/710)**

As seen above, a reserved license is shown by FLEXlm as in use even when no one is using it.

When a reserved license *is* in use, its allocation will not change, but the session appears this way:

**Users of Viewer: (Total of 5 licenses issued; Total of 1 license in use)**

**“Viewer” v10.1, vendor: ARCGIS**

### **floating license**

**rachel DELL x(<C;tQ%e;S (v10.1) (10.0.0.145/710 102), start Fri 12/25 11:40**

When the session is closed, the license will be shown as reserved again in the report and the license will remain allocated to that user.

Licenses are reserved per user, group, host, host group, ip, display or project. Details about group or host-group members exist only in the Options File: details of groups do not appear on the license output.

## **FLEXlm Reservations in OpenLM**

As of Version 4, the number of license reservations now displays directly in OpenLM, so OpenLM users can follow the utilization of their reserved licenses as they do when using FLEXlm. The number of available licenses decreases when a Reserved license is allocated.

When a license is Reserved but not in use, OpenLM Server records a session (defined as a “reserved session”) with a dedicated username (defined as a “reserving user”) in the following format:

FLEXlm\_Reserved\_<Entity Type>\_<Entity Name>. E.g. - FLEXlm\_Reserved\_U\_rachel

Entity Name denotes a user, group, host, host group, ip, display or project and would have one of the following values:

“U” for user

“G” for group

“H” for host

“HG” for host group

“D” for display

“I” for internet

“P” for project

A reserved license is fully (100%) utilized when the user or group consumes the license 100% of the time and no sessions of reserved sessions are shown in the system. The more reserved sessions you have, that means that the reserved license is allocated but not consumed (utilized).

A more accurate picture of license allocation can be achieved using **OpenLM License Usage** report while filtering by a “reserving user” name. If the report shows constant usage higher than 1, it means that license administrator can decrease the number of reserved licenses for that entity and thereby free up licenses for the benefit of all other users.

## A Real Life Example

Let’s consider the following example:

A small company has 5 concurrent licenses of Viewer. The company has many users (more than 5) that need to use this license but it is absolutely required that the engineers would have a free license when they need it.

So the License Administrator decides to reserve some Viewer licenses for the engineers and adds the following lines to the Options File:

```
GROUP engineers natal efrat rachel chen richard
```

```
RESERVE 2 Viewer GROUP engineers
```

Now there are always 2 Viewer licenses reserved for the engineers group.

A month goes by and the License Administrator uses OpenLM to create “License Usage” report for Viewer.

### **Option A - Number of used license never reaches the maximum**

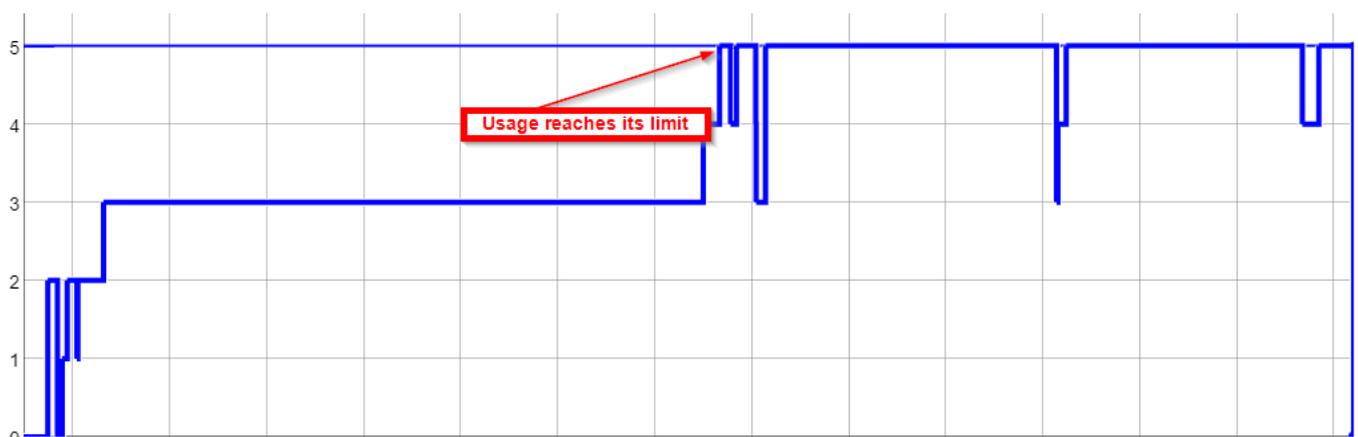
In this scenario, during the the elapsed month, number of used licenses never reached the maximum of 5 licenses:



Here - every user (engineer or not) that ever needed a license always got it. In this case the license administrator should do nothing but when maintenance renewal is due, he should produce this chart again and check. If number of used licenses never reach the maximum, he should consider reducing the total of maintained licenses.

### Option B - Number of used licenses reach the Maximum

In this scenario, during the elapsed month, number of used licenses reached the maximum of 5 licenses. When checking OpenLM denials report, the License Administrator may even see that there are some users (engineers and others) that were denied of licenses when they needed them:



Now the License Administrator needs to investigate and drill down to the data.

As mentioned above, OpenLM creates a special user for reserved licenses. In this case, it is named: FLEXlm\_Reserved\_G\_engineers. This user is in use whenever reserved licenses are

**NOT** consumed.

Now, Administrator can filter same License Usage report by this user and analyze the results:

If no usage at all is demonstrated for that user, it means that the reservation was fully utilized – there was always a user of the engineers group that used it. This, in combination with denials report for the engineers group, may lead to a conclusion that

On the other hand, it is possible that there is usage for that user and it is continuous and not fragmented:



In this case, license administrator learns the all the time, there was one reserved license that was laying aside unused by the group of engineers, while other people, that were denied of licenses could have used it. Here the license administrator may consider reducing the number of reserved licenses for the engineers group.

A third option is that the reserved user does not have any (or has minimal) usage during the stated period:



This, combined with OpenLM denials report, may suggest that the engineers don't get enough licenses. Here License Administrator may consider increasing the number of reserved licenses for the engineers or even replacing their concurrent expensive licenses with single use/named licenses.

## Summary

Reserved licenses are floating (concurrent) licenses that are permanently deprived from all license users. It is very important to follow the utilization of such features. OpenLM gives its users the proper tools to do just that

In version 4.1 OpenLM will allow license administrators to filter reserved licenses from License Usage report so that the report can be viewed in both ways: the total number of licenses consumed overall including reserved licenses, or the total number of actual consumed reserved licenses