

Overview - Control Network License Access Using an Options File

Access to licenses is controlled with a FlexNet options file that is configured with the settings you want to use. The options file is an optional component of the FlexNet license management system and is not required for normal license operation.

The following are examples of options file syntax and usage.

Note: The options RESERVE, MAX, INCLUDE, EXCLUDE, INCLUDE_BORROW, and EXCLUDE_BORROW can be applied to a user, computer, group of users or computers, IP address, (computer names and user names are case sensitive). You will see different examples of these below.

Entering comments in the options file:

All syntax following a hash (#) will be ignored by the license manager. An example of an options file comment is shown below:

```
#This is a comment
```

Defining groups:

As you manage your licenses, specifying who can and cannot access them, it's convenient to define groups of users or computers. Groups are very useful when you starting reserving or restricting license usage.

You can define groups using the Windows login name or the computer name. By default, computer names and user names are case-sensitive unless the GROUPCASEINSENSITIVE ON statement has been added to the options file.

```
GROUP [groupname] [user1] [user2] [user3]
```

```
HOST_GROUP [groupname] [computername1] [computername2] [computername3]
```

The following example defines a group called EngineeringGroup for three users:

```
GROUP EngineeringGroup user1 user2 user3
```

The following example defines a group called DraftingDept with three computers:

```
HOST_GROUP DraftingDept computer1 computer2 computer3
```



To create a group with a large number of users, define multiple GROUP lines with the same group name, each containing up to the maximum of 4,000 characters. Multiple GROUP lines with the same group name will add all the specified users into a single group.

Disabling case sensitivity for user and computer names:

You can enable/disable case sensitivity for user names and computer names when using the GROUP or HOST_GROUP commands. Without this statement, the default is that user and computer names are case-sensitive.

The following example disables case sensitivity for user and computer names:

```
GROUPCASEINSENSITIVE ON
```

The following example does not disable case sensitivity for user and computer names:

```
GROUPCASEINSENSITIVE OFF
```

Reserving licenses:

Reserve a specific count of licenses to help ensure there are product licenses available when needed—licenses that are reserved are not available to other users. For example, if you have specific people working on a time-sensitive project and you want to ensure that licenses will always be available for them, you can reserve licenses for those people.

```
RESERVE [count] [productfeature] [type] [name]
```

The following examples reserve either one or five AutoCAD 2016 licenses for a variety of types:

```
RESERVE 1 86445ACD_2016_OF USER user1
```

```
RESERVE 1 86445ACD_2016_OF HOST computer1
```

```
RESERVE 5 86445ACD_2016_OF GROUP EngineeringGroup
```

```
RESERVE 5 86445ACD_2016_OF HOST_GROUP DraftingDept
```

```
RESERVE 1 86445ACD_2016_OF INTERNET 192.168.0.100
```

```
RESERVE 5 86445ACD_2016_OF INTERNET 192.168.0.*
```

Restricting maximum license usage:

Limit usage of specific licenses. This can help ensure maximum license availability by restricting access to a fixed number of licenses for specified products.



MAX [count] [productfeature] [type] [name]

The following examples set a limit of either one or five AutoCAD 2016 licenses for a variety of types:

MAX 1 86445ACD_2016_OF USER user1

MAX 1 86445ACD_2016_OF HOST computer1

MAX 5 86445ACD_2016_OF GROUP EngineeringGroup

MAX 5 86445ACD_2016_OF HOST_GROUP DraftingDept

MAX 1 86445ACD_2016_OF INTERNET 192.168.0.100

MAX 5 86445ACD_2016_OF INTERNET 192.168.0.*

Excluding license usage:

Block access to specific licenses. Any users, hosts or IP addresses not explicitly excluded will continue to have access to these licenses.

EXCLUDE [productfeature] [type] [name]

The following examples block access to AutoCAD 2016 licenses for a variety of types:

EXCLUDE 86445ACD_2016_OF USER user1

EXCLUDE 86445ACD_2016_OF HOST computer1

EXCLUDE 86445ACD_2016_OF GROUP EngineeringGroup

EXCLUDE 86445ACD_2016_OF HOST_GROUP DraftingDept

EXCLUDE 86445ACD_2016_OF INTERNET 192.168.0.100

EXCLUDE 86445ACD_2016_OF INTERNET 192.168.0.*

Note: EXCLUDE statements always supersede conflicting INCLUDE statements. Conflicts between an EXCLUDE list and the INCLUDE list are resolved by the EXCLUDE taking precedence.

Including license usage:

Provide access to specific licenses. Any users, hosts or IP addresses not explicitly included will not have access to the specified licenses. If you want to block license usage for only a few users, you should consider using the EXCLUDE syntax.

INCLUDE [productfeature] [type] [name]



The following examples provide access to AutoCAD 2016 licenses for the specified type only:

```
INCLUDE 86445ACD_2016_OF USER user1
```

```
INCLUDE 86445ACD_2016_OF HOST computer1
```

```
INCLUDE 86445ACD_2016_OF GROUP EngineeringGroup
```

```
INCLUDE 86445ACD_2016_OF HOST_GROUP DraftingDept
```

```
INCLUDE 86445ACD_2016_OF INTERNET 192.168.0.100
```

```
INCLUDE 86445ACD_2016_OF INTERNET 192.168.0.*
```

Note: Since EXCLUDE always takes precedence over a conflicting INCLUDE statement, you can minimize confusion by only using one statement or the other in the same options file.

Setting license inactivity timeout:

You can configure the license manager to automatically reclaim inactive licenses after a specified time. Inactivity is defined as an idle product with no commands issued in the specified time. Users will be given the option to save their current drawing if a license is revoked by the license manager for inactivity. Time is specified in seconds and the lowest acceptable value for these options is 900 seconds (15 minutes).

```
TIMEOUT [productfeature] [seconds]
```

```
TIMEOUTALL [seconds]
```

This example sets a 30-minute timeout for all AutoCAD 2016 licenses.

```
TIMEOUT 86445ACD_2016_OF 1800
```

This example sets a timeout of 30 minutes for all products managed by the Network License Manager.

```
TIMEOUTALL 1800
```

Report log creation:

The report log file is a compressed, encrypted file that provides usage reports on license activity.

```
REPORTLOG [+]report_log_path
```

Windows example: A report log named report.rl is located in the folder C:\My Documents.

```
REPORTLOG +"C:\My Documents\report.rl"
```



Note: Path names that contain spaces must be enclosed in quotation marks. The path must already exist as the license manager will not create this location for you.

In the REPORTLOG syntax, “[+]” means that new entries to the log file are appended to previous entries rather than overwriting them each time the Network License Manager is restarted. It is recommended that you use this option to retain a history of log entries.

Controlling license borrowing:

Several options file commands control license borrowing for specified licenses.

Maintaining a pool of available licenses:

BORROW_LOWWATER specifies how many licenses cannot be borrowed. This helps ensure that a specified number of licenses always remain in the license pool so your pool of available licenses does not get depleted by allowing all licenses to be borrowed.

BORROW_LOWWATER [productfeature] [count]

The following example blocks license borrowing for five AutoCAD 2016 licenses:

```
BORROW_LOWWATER 86445ACD_2016_OF 5
```

Setting the borrow period:

You can specify the maximum duration of time, in hours, that a specific license can be borrowed. This value cannot be above the maximum borrow period specified by Autodesk in the product license file.

MAX_BORROW_HOURS [productfeature] [hours]

The following example limits license borrowing of AutoCAD 2016 licenses to 3 days:

```
MAX_BORROW_HOURS 86445ACD_2016_OF 72
```

Note: Without this setting in an options file, the default borrow period for licenses is 6 months. We strongly recommend establishing a more restricted borrow period.

Excluding license borrowing:

Block the ability to borrow specific licenses. Any users, hosts or IP addresses not explicitly excluded will continue to have the ability to borrow licenses.



EXCLUDE_BORROW [productfeature] [type] [name]

The following examples block borrowing of AutoCAD 2016 licenses for a variety of types:

EXCLUDE_BORROW 86445ACD_2016_OF USER user1

EXCLUDE_BORROW 86445ACD_2016_OF HOST computer1

EXCLUDE_BORROW 86445ACD_2016_OF GROUP EngineeringGroup

EXCLUDE_BORROW 86445ACD_2016_OF HOST_GROUP DraftingDept

EXCLUDE_BORROW 86445ACD_2016_OF INTERNET 192.168.0.100

EXCLUDE_BORROW 86445ACD_2016_OF INTERNET 192.168.0.*

EXCLUDE_BORROW 86445ACD_2016_OF PROJECT CivilProject

Note: Similar to EXCLUDE and INCLUDE, EXCLUDE_BORROW takes precedence over conflicting INCLUDE_BORROW statements.

Including license borrowing:

Provide the ability to borrow specific licenses. Any users, hosts or IP addresses not explicitly included will not have the ability to borrow the specified licenses. If you want to block license borrowing for only a few users, you should consider using the EXCLUDE_BORROW syntax above.

INCLUDE_BORROW [productfeature] [type] [name]

The following examples allow borrowing of AutoCAD 2016 licenses for the specified type only:

INCLUDE_BORROW 86445ACD_2016_OF USER smithj

INCLUDE_BORROW 86445ACD_2016_OF HOST computer1

INCLUDE_BORROW 86445ACD_2016_OF GROUP EngineeringGroup

INCLUDE_BORROW 86445ACD_2016_OF HOST_GROUP DraftingDept

INCLUDE_BORROW 86445ACD_2016_OF INTERNET 192.168.0.100

INCLUDE_BORROW 86445ACD_2016_OF INTERNET 192.168.0.*

INCLUDE_BORROW 86445ACD_2016_OF PROJECT CivilProject

Note: Since EXCLUDE_BORROW always takes precedence over a conflicting INCLUDE_BORROW statement, you can minimize confusion by only using one statement or the other in the same options file.

