

# **Distinct Floating License Manager**

**Floating License Manager  
for Distinct components and applications**

**Version 1.0**

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## **Table of Contents**

Table of Contents .....	2
1 Overview .....	3
1.1 Introduction .....	3
2 Distinct Floating License Manager .....	5
2.1 Getting Started.....	5
2.2 How to Interpret the Floating License Manager Display .....	5
2.3 How to Use the Distinct Floating License Manager .....	5
3 Information for Developers Using a Distinct Toolkit.....	7
3.1 How an Application that Uses the Distinct License Manager Behaves .....	7
3.2 Registry Entries .....	7

## **1 Overview**

### **1.1 Introduction**

The Distinct Floating License Manager (DFLM) allows you to distribute Distinct applications or applications that incorporate Distinct libraries on a concurrent usage basis. The DFLM manages a fixed number of licenses and allocates them on a first come first served basis. Every time such an application starts, a license is issued dynamically to the user from the pool of available licenses, up to the number of total licenses available. When the user closes the application, that license becomes available to other users.

The total number of licenses available is controlled by a file containing serial numbers. A license file with the number of initial licenses needed, can be purchased from Distinct, and additional licenses can be added as necessary.

The DFLM displays the total number of licenses purchased for each product, and of those, how many are currently in use. The DFLM provides the user with statistical information about the license usage, the maximum number of licenses that have been used at one time, and the number of requests for a license that have been denied. The DFLM can also display information about the use of a specific license, such as the IP address of the user the license has been granted to, when it was first granted and when it was last renewed.

The Distinct Floating License Manager allows an administrator password to be set. Administrator privileges include the ability to monitor, refresh and revoke licenses. The administrator may set the timeout and license renewal values to manage the floating licenses. Users other than an administrator can view the status of serial numbers but will not be permitted to perform any operations reserved for the administrator.

From the perspective of users running applications that incorporate a Distinct module, requesting a license is virtually transparent. The first time the user runs the application, the user will be given the option to use a floating license. The user may be asked to enter the IP address of the DFLM, if it can not be found on the local subnet. Once the application knows where the DFLM is located on the network, the application will automatically request a license, each time it starts, without user intervention. If the DFLM is not running, then the Distinct License Manager gives the user the option of entering a single user license or other licensing options. For more information on the Distinct License Manager see its documentation.

The following sections describe how the DFLM is set up and all the administrator options available.



## **2 Distinct Floating License Manager**

### **2.1 Getting Started**

Copy the DFLS.EXE file distributed with this toolkit to the computer on the network from where you wish to run the Distinct Floating License Manager. You should know the IP address of the computer. Also copy the SERIALNO.TXT file you will have received from Distinct Corporation to the same directory. If you wish to place the SERIALNO.TXT file in a different location you must specify the full path of this file in the registry. See the Registry Entries section in this chapter for information on how to do this. To launch the Distinct Floating License Manager either double-click on its icon or select Run from the Start menu and type in the full name including the path of this file.

### **2.2 How to Interpret the Floating License Manager Display**

The display area of the Distinct Floating License Manager is split into two parts. The upper section of the display lists all the Products the Distinct Floating License Manager supports, the maximum number of licenses available and the number of licenses currently being used for each product. It also provides statistical information for each product about the maximum number of licenses that have been used at one time, and the number of license requests that have been denied. This information indicates to the administrator whether sufficient licenses have been purchased, or if there are not enough licenses to fill all the requests. The administrator can reset the statistics at any time by selecting Reset from the License menu. The product names can be customized to include your product in the Distinct Floating License Manager product list, see the Registry Entry section of this chapter for information on how to do this.

The lower section displays detailed information about each specific license. To view only the license information for one of the products in the product list, double click the product name. If you wish to view the information for some products, select their names from the Product menu or, holding down the CTRL key, select click on the product names in the display and then choose Details from the License menu. All the serial numbers and key codes for the product[s] selected will be displayed. If a license is in use, the IP address of the user who requested it is shown together with the time and date that the license was allocated and when it was last renewed.

### **2.3 How to Use the Distinct Floating License Manager**

#### **How to Set Administrator Privileges**

The License menu lets the administrator manage the licenses. If the user is not logged in as administrator the user can only monitor the licenses, but is unable to set any options or revoke licenses. To login as administrator select Login from the License menu and you will be prompted for a password. After entering the password the administrator has full use of all options. To logoff select Logoff from the License menu. To change the administrator password select Password from the License menu. You will be prompted to type in the old password, the new password, and the new password again for confirmation. Click OK to change the password.

#### **How to Renew an Issued License and Revoke Idle Licenses**

To set the timeout or renew interval values select Timeout from the License menu. You will be prompted to enter a renew and timeout value.

The Renew period is the time in seconds after which the application's license manager renews its license. That is, if the renew period is 300 seconds, the Distinct License Manager will contact the server every 300 seconds to renew its license. Licenses need to be renewed periodically, to make sure that licenses allocated to systems are still being used by those systems.

The Timeout value is the time after which the Distinct Floating License Manager will revoke a license if it has not been renewed. That is, if the timeout period is 1200 seconds, the Distinct License Manager has not tried to renew its license within 1200 seconds the license it has been granted is revoked. The timeout period should be set to at least twice the renew value so that the server waits for two missed renew requests before revoking a license. Unused Licenses need to be revoked this way to account for systems going down or being shut down without correctly closing the application that requested the license. The Distinct License Manager uses a 10 second timer, so the renew period is approximated to the next 10 second interval.

When setting these values remember that setting the Timeout and Renewal values too low can lead to unnecessary network traffic. Using too large a value can result in poor monitoring of the floating licenses. The default Renewal value is 300 seconds and the default Timeout value is 1200 seconds. These values may be changed depending on your network traffic and license requirements.

### **How to Reset the Statistics for Existing Licenses**

To reset all the statistics select Reset from the License menu. When Reset is selected, the maximum number of concurrent users and the number of requests for a license that the Distinct Floating License Manager has denied, are reset.

### **How to get Detailed Statistics on each License**

The detailed list of licenses displays the serial number and key code for each license issued, the IP address to which the license is allocated, when the license was first allocated and when it was last renewed.

Double clicking on any one product shows the license details for that specific product in the lower half of the display. To see license details for multiple products select the products by name from the Product Menu. The list will contain the license information for all products with a checkmark beside the product name. License details for more than one product can also be displayed by selecting multiple products in the top list box and then choosing the Detail option from the License menu

### **How to Change the License File in Use**

To read new serial numbers from an updated license file the Distinct Floating License Manager needs to be refreshed. The administrator can select Refresh from the License menu to update the detailed list and the total number of licenses. If you are just adding more licenses make sure that the file contains all the old licenses. If some of the old serial numbers that are already allocated to a user are not present in the new file this could lead to some licenses currently in use being revoked.

### **How to Revoke Licenses**

There are two ways in which licenses can be revoked, automatically by the DFLM or manually by the administrator. The Distinct Floating License Manager automatically revokes licenses that have not been renewed within the timeout period. The administrator can also revoke licenses by selecting the granted license(s) from the detailed list and selecting Revoke from the License menu.

### **How to Exit from the Distinct Floating License Manager**

To exit from the Distinct Floating License Manager select Exit from the License menu. A dialog will appear to confirm that you want to shut down the license server ( This dialog can be suppressed through a registry entry, see the Registry Entries section for more information). When the license server is closed, existing clients can continue to use their license but new clients will be unable to get a license.

### 3 Information for Developers Using a Distinct Toolkit

#### 3.1 How an Application that Uses the Distinct License Manager Behaves

This information may be required by third party developers who want their product name to be displayed in the Distinct Floating License Manager.

When the application first calls **D32LMCGetLicense** function or a Distinct Component in your application is used for the first time, the user will be given the option to enter a serial number, use a trial version of the software or to get a license from the Distinct Floating License Manager. See the Introduction to the Distinct Licensing Scheme in the documentation for more information.

#### 3.2 Registry Entries

This information may be required by third party developers who want their product name to be displayed in the Distinct Floating License Manager. There is also a registry entry that can be used to suppress the confirmation dialog when shutting down the Distinct Floating License Manager.

The following registry entries are stored under the key below and may be modified to customize dialogs:

**\HKEY\_LOCAL\_MACHINE\Software\Distinct\Servers\LicenseServer**

Value	Type	Description
LicenseFile	REG_SZ	<i>The name of the license file.</i> This contains the complete path name for the license file. If this entry is not present, then the serialno.txt license file must be in the directory from which DFLS.exe is launched. The license file contains the <serial number, key> entries, one entry on each line. This registry value does not exist by default.
Intelliterm	REG_SZ	<i>Product name used by DFLM</i> This registry value does not exist by default
Server	REG_SZ	<i>Product name used by DFLM</i> This registry value does not exist by default
NFS	REG_SZ	<i>Product name used by DFLM</i> This registry value does not exist by default
VIT	REG_SZ	<i>Product name used by DFLM</i> This registry value does not exist by default
Extensions	REG_SZ	<i>Product name used by DFLM</i> This is the registry entry you need to use to have your product name appear in the Product list in the DFLM. This registry value does not exist by default. For example: To rename Extensions to MyProduct run the <b>Registry Editor</b> , <b>regedt32.exe</b> under Windows NT and <b>regedit.exe</b> under Windows 95. Go to the following location in the registry: <b>\HKEY_LOCAL_MACHINE\Software\Distinct\Servers\LicenseServer</b> . From the <b>Edit</b> menu, select <b>New</b> , then select <b>String Value</b> . Type in Extensions for the Value Name, then double click on the Value Name and type in MyProduct for the Value Data. When you next run DFLM the product list will contain MyProduct

instead of Extensions.

The following registry entry may be added to suppress the confirmation dialog when exiting the DFLM:

**\HKEY\_LOCAL\_MACHINE\Software\Distinct\Servers\LicenseServer\Close**

<b>Value</b>	<b>Type</b>	<b>Description</b>
Confirm	REG_SZ	<p><i>Use to suppress the confirmation dialog.</i></p> <p>When exiting the Distinct Floating License Manager a dialog asks you to confirm that you want to shut down the DFLM. To suppress the dialog make this registry entry and set the value data to "No". If this registry entry does not exist or is set to a value other than "No" then the confirmation dialog will appear. This registry value does not exist by default.</p> <p>Note: To make this entry run the <b>Registry Editor, regedt32.exe</b> under Windows NT and <b>regedit.exe</b> under Windows 95. Go to the following location in the registry: <b>\HKEY_LOCAL_MACHINE\Software\Distinct\Servers\LicenseServer</b>. From the <b>Edit</b> menu, select <b>New</b>, then select <b>Key</b>. Type in "Close" and hit the Enter key. Then from the <b>Edit</b> menu select <b>New</b>, and then <b>String Value</b>. Type in "Confirm" for the Value Name, then double click on the Value Name and type in "No" for the Value Data. When you next run DFLM the confirmation dialog will not appear when you exit the application.</p>

