

"Licensing for

the rest of us"

LicenseControlLogo.png "

Introduction

LicenseControl implements a licensing strategy that:

- leaves you in control of your software, your system and your privacy
- provides the ability to easily move your license(s) to a different system
- does not require you to:
 - connect to some local or third-party server every time you use your licensed software
 - regularly connect to some server that has the specter of tracking more than just your application licenses
 - install and manage centralized or local licensing server(s)
 - supply some unspecified information about your system to some server
 - worry about using a licensing system that relies upon "hacks" that pose a risk to your system's operability

Information about various usage scenarios can also be found in the **LicenseControl ReadMe** document (available via **LicenseControl's Help** menu and via www.derman.com/Download/Downloads.html).

BlueLine.gif "

Licensing Concepts

LicenseControl is built upon the following concepts:

- **Trial Mode and Licensed Mode:** A **LicenseControl**'d application can run in either Trial mode or Licensed mode. The software Vendor/developer determines which capabilities are available in each mode but, in general, Trial mode incorporates some restrictions that are designed to allow evaluation of the software within certain limitations whereas Licensed mode

provides full access to all the application's capabilities. This dual-mode strategy allows Internet-based distribution of software so it can be freely evaluated in Trial mode then "activated" (i.e., set to run in Licensed mode) via a licensing code that can also be purchased and delivered via Internet.

- **License:** A license allows a given application to operate in Licensed mode on a single system. The software Vendor/developer defines which of the application's capabilities are available in Licensed versus Trial mode.
- **License ID:** The licensing code you receive when you purchase one or more licenses for a *LicenseControl*'d application. A License ID can include one or more licenses and the licenses can be added onto and/or upgraded as long as all the licenses included in a single License ID are upgraded to the same (license-compatible) level.
- **Upgrade ID:** The licensing code you receive when you purchase an upgrade for an application, often to use a new/upgraded version of an application for which you already have a license. An Upgrade ID contains one or more license upgrades that can be used to upgrade the licenses in one or more (license-compatible) License IDs. Upgrade IDs are never used to license applications, directly. Upgrade IDs are only used to upgrade licenses in existing License IDs.
- **Add-On ID:** The licensing code you receive when you purchase additional licenses for an application for which you already have one or more licenses. An Add-On ID contains one or more add-on licenses that can be used to increase the number of licenses in one or more License IDs. Add-On IDs are never used to license applications, directly. Add-On IDs are only used to add additional licenses to existing License IDs.
- **License Compatibility:** License compatibility is defined by the application Vendor and determines which License IDs apply to which versions of which applications as well as which Upgrade and Add-On IDs apply to which License IDs. *LicenseControl* only allows licensing operations that involve license-compatible IDs and versions of applications.
- **Licensing Server:** When you perform a licensing operation, *LicenseControl* communicates with a licensing server to acquire a license. This communication *only* occurs when a licensing operation is requested and does not occur at any other time. Specifically, running a *LicenseControl*'d application does not cause any communication with the licensing server unless you press either of *LicenseControl*'s **Activate**, **Re-Activate**, **De-Activate**, **Show Licensing Information** or **Add Onto or Upgrade**

License(s)... buttons. To communicate with the licensing server, *LicenseControl* uses the standard protocols (HTTP and SSL/HTTPS) and communication ports (80 and 443) that your web browser uses. If you can use your browser to view www.derman.com, *LicenseControl* can normally communicate with the licensing server. Detailed information about the content of the licensing communications, along with instructions for capturing and verifying what's actually communicated to the licensing server is available via www.derman.com/LicenseControl/LC-FAQ.html.

1__\$!@%!#__BlueLine.gif "

Licensing Operations

LicenseControl presents its licensing capabilities via the licensing window:

LicensingWindow.gif "

Licensing an Application : Activating or Re-Activating a License

Licensing an application requires that a license request be generated and submitted to a licensing server to obtain a license which is then activated. This process is completed automatically, via the Internet. For a basic explanation of the various licensing operations, press the **More Information** button.

To license an application:

Option 1 : Supply a **License ID** and press the **Activate** button

If this is the initial licensing of this application on this system, you must use this option.

- **License ID**: If a system-based/soft copy is available (e.g., via the email/receipt from a purchase), the easiest way to enter the License ID is via regular copy and paste methods. If the **License ID** is entered manually, be sure to supply every character, as each is significant and required. Note that the **License ID** is equivalent to being the key that unlocks your license and should be guarded accordingly.
- **Activate**: Pressing this button may present a Software License Agreement for acceptance, then will cause this system to communicate with a licensing server to obtain your license. Once obtained, the license will automatically be activated.

When the licensing process has been completed, the **License Status** and **Expiry**

Date items are updated. The **Progress Status** indicates progress and results of the licensing activity. The entire process should take only a number of seconds to complete. Your application is licensed for operation on this system when the **License Status** at the top of the licensing window indicates that your application is "**Licensed for this system**".

A licensing operation password may be required to perform the **Activate** operation. For more information, see the ***Controlling Access to Licensing Operations*** section.

Option 2 : Clear any **License ID** entry and press the **Re-Activate** button

If this application (or another license-compatible application such as another version of this application) is currently licensed on this system, you can use this option. In this case, you won't need to supply your **License ID** (the **Re-Activate** button is not available when a **License ID** entry is present).

- **Re-Activate:** Pressing this button may present a Software License Agreement for acceptance, then will cause this system to communicate with a licensing server to retrieve an existing license. Once retrieved, the license will automatically be activated.

When the licensing process has been completed, the **License Status** and **Expiry Date** items are updated. The **Progress Status** indicates progress and results of the licensing activity. The entire process should take only a number of seconds to complete. Your application is licensed for operation on this system when the **License Status** at the top of the licensing window indicates that your application is "**Licensed for this system**".

A licensing operation password may be required to perform the **Re-Activate** operation. For more information, see the ***Controlling Access to Licensing Operations*** section.

Moving an Application's License to a Different System : De-Activating a License

An activated license can be de-activated (i.e., removed from a system) so it can be reused to license an applicable application on a different system. To move a licensed application to a different system, it is necessary to de-activate the license on the original system then install the software on the replacement system and activate the license on that system. A de-activated license can be activated by supplying its **License ID** and pressing the **Activate** button.

When changing systems, you'll need to use this option or your license will remain assigned to (i.e., used up by) the system you're replacing and won't be available for use on your replacement system.

To de-activate a license (e.g., on the system you're replacing), press the **De-Activate** button:

- **De-Activate:** Pressing this button will communicate with the licensing server to de-activate your license. When a license is de-activated, the application's licensing status is reverted to Trial-mode operation. The **De-Activate** button is enabled only when your system "thinks" there is an activated license for this application on this system.

When the de-activation process has been completed, the **License Status** and **Expiry Date** items are updated. The **Progress Status** indicates progress and results of the licensing activity. The entire process should take only a number of seconds to complete.

A licensing operation password may be required to perform the **De-Activate** operation. For more information, see the ***Controlling Access to Licensing Operations*** section.

To activate a license (e.g., on the replacement system), supply the **License ID** and press the **Activate** button:

- **License ID:** If a system-based/soft copy is available (e.g., via the email/receipt from a purchase), the easiest way to enter the License ID is via regular copy and paste methods. If the **License ID** is entered manually, be sure to supply every character, as each is significant and required. Note that the **License ID** is equivalent to being the key that unlocks your license and should be guarded accordingly.
- **Activate:** Pressing this button may present a Software License Agreement for acceptance, then will cause this system to communicate with a licensing server to obtain your license. Once obtained, the license will automatically be activated.

When the licensing process has been completed, the **License Status** and **Expiry Date** items are updated. The **Progress Status** indicates progress and results of the licensing activity. The entire process should take only a number of seconds to complete. Your application is licensed for operation on this system when the **License Status** at the top of the licensing window indicates that your application is

"Licensed for this system".

A licensing operation password may be required to perform the **Activate** operation. For more information, see the ***Controlling Access to Licensing Operations*** section.

If you uninstalled the licensed application without de-activating its license, you can use the following sequence to de-activate the license so it can be used on another system:

- Re-install and run the application.
- Press the **Re-Activate** button to retrieve and activate the license for that application on that system.
- Press the **De-Activate** button to de-activate the license for that application on that system (the **De-Activate** button is enabled only when your system "thinks" there is an activated license for this application on this system).

Changing systems without de-activating your license is, effectively, giving away your license.

Upgrading the Licenses in an Existing License ID : Add Onto or Upgrade License(s)...

Sometimes existing licenses will require upgrading (e.g., to work with an updated version of the application). In these cases, the application Vendor produces an Upgrade ID that includes one or more license upgrades that can be applied to upgrade one or more licenses in one or more applicable License IDs.

To use an Upgrade ID to upgrade one or more licenses included in a License ID:

- Either supply a **License ID** or clear the **License ID** entry to specify the License ID used to activate the currently activated license for this application on this system.
- Press the **Add Onto or Upgrade License(s)...** button. A licensing operation password may be required to perform the **Add Onto or Upgrade License(s)...** operation (for more information, see the ***Controlling Access to Licensing Operations*** section). A dialog is presented that shows the current information about the specified License ID, for example:

Upgrade-1.gif "

- Press the **Apply License Upgrade(s)...** button. An upgrade dialog is

presented, for example:

Upgrade-2.gif "

- Press the **Cancel** button to end the upgrade process without applying any license upgrades.
- Press the **Add Upgrade ID** button and supply an **Upgrade ID** via the dialog that's presented, for example:

Upgrade-3.gif "

- Press the **Cancel** button to end the upgrade process without applying any license upgrades.
- Press the **Continue** button and the license upgrades available in the supplied Upgrade ID are set to be applied, up to the maximum number of licenses in the License ID, for example:

Upgrade-4.gif "

- By repeating the previous 3 steps, multiple Upgrade IDs can be added until there are enough license upgrades to upgrade all the licenses in the License ID (all licenses in a License ID must be upgraded to the same compatibility level at once).
- As required, select any Upgrade ID entry that has been added and press the + or – buttons to adjust the number of license upgrades that are to be applied from that Upgrade ID.
- When all the licenses in the License ID are set to be upgraded, the **Apply Upgrade(s)** button is enabled—press the **Apply Upgrade(s)** button to complete the upgrade process.
- Press the **Cancel** button to end the upgrade process without applying any license upgrades.

Viewing the licensing information after applying the upgrade, as per the graphics above, shows:

Upgrade-5.gif "

Some additional points about upgrades:

- The licenses in a License ID can be upgraded regardless of whether they are activated or not.
- Once you have successfully applied all the license upgrades contained in a particular Upgrade ID, you will no longer need to (or be able to) use that

Upgrade ID. You can use the **Show Licensing Information** operation to determine the current status of an Upgrade ID.

- You always use the (original) License ID (that's now been upgraded) when activating licenses (the licensing server remembers that the License ID has been upgraded).
- Upgrade IDs are never used to activate licenses, only License IDs are used for license activations.

Adding More Licenses to an Existing License ID : Add Onto or Upgrade License(s)...

For some applications, it's possible to add onto the number of licenses included in an existing License ID, rather than acquiring additional License IDs. In these cases, the application Vendor produces an Add-On ID that includes one or more add-on licenses that can be applied to add one or more licenses onto one or more applicable License IDs.

To use an Add-On ID to add one or more licenses onto the number of licenses included in a License ID:

- Either supply a **License ID** or clear the **License ID** entry to specify the License ID used to activate the currently activated license for this application on this system.
- Press the **Add Onto or Upgrade License(s)...** button. A licensing operation password may be required to perform the **Add Onto or Upgrade License(s)...** operation (for more information, see the ***Controlling Access to Licensing Operations*** section). A dialog is presented that shows the current information about the specified License ID, for example:

AddOn-1.gif "

- Press the **Apply Add-On License(s)...** button. An add-on dialog is presented, for example:

AddOn-2.gif "

- Press the **Cancel** button to end the add-on process without applying any add-on licenses.
- Press the **Add Add-On ID** button and supply an **Add-On ID** via the dialog that's presented, for example:

AddOn-3.gif "

- Press the **Cancel** button to end the add-on process without applying any add-on licenses.
- When the **Continue** button is pressed, the add-on licenses available in the supplied Add-On ID are set to be applied, for example:

AddOn-4.gif "

- By repeating the previous 3 steps, multiple Add-On IDs added.
- As required, select any Add-On ID entry that has been added and press the + or – buttons to adjust the number of add-on licenses that are to be added to the License ID from that Add-On ID.
- Press the **Apply Add-On(s)** button to complete the add-on process.
- Press the **Cancel** button to end the add-on process without applying any add-on licenses.

Viewing the licensing information after applying the add-on, per the graphics above, shows:

AddOn-5.gif "

Some additional points about add-ons:

- The number of licenses in a License ID can be added onto regardless of whether any licenses are activated or not.
- Once you have successfully applied all the add-on licenses contained in a particular Add-On ID, you will no longer need to (or be able to) use that Add-On ID. You can use the **Show Licensing Information** operation to determine the current status of an Add-On ID.
- You always use the (original) License ID (that's now been added onto) when activating licenses (the licensing server remembers that the License ID has been added onto).
- Add-On IDs are never used to activate licenses, only License IDs are used for license activations.

Storing License IDs : Store License ID and Remove Stored License ID

LicenseControl allows the creation of a stored License ID. A stored License ID

can be a convenience mechanism for individual system users and aid in multi-system management in a corporate environment (see the ***Multiple Systems Administration*** section below, for more detail).

When ***LicenseControl*** starts, it looks for a stored License ID for the current application and, if found, automatically inserts that License ID into the **License ID** entry box, but shows only "bullet"/• characters, and adds a note indicating that a License ID has been automatically supplied. The user can clear the automatically entered License ID, if required.

To create a stored License ID:

- Supply the **License ID** via the licensing window.
- Hold down the **Shift+Option** keys and press the **Store License ID** button that replaces the **Activate** button (the **Store License ID** button is disabled when a stored License ID already exists for this application).

In most installations, creating a stored License ID will require Administrator-level privileges and an authentication dialog will be presented, if required.

To remove a stored License ID:

- Hold down the **Shift+Command** keys and press the **Remove Stored License ID** button that replaces the **Activate** button on the licensing window (the **Remove Stored License ID** button is enabled only when a stored License ID exists for this application).

In most installations, removing a stored License ID will require Administrator-level privileges and an authentication dialog will be presented, if required.

A licensing operation password may be required to perform the **Store License ID** operation or the **Remove Stored License ID** operation. For more information, see the ***Controlling Access to Licensing Operations*** section.

Recommendation when using a stored License ID: Unless the system is located in an environment where no security is required (such as with most home-resident systems), you should set a password for all licensing operations except the re-activate operation. You can use the Keychain application to securely store passwords so you don't lose them.

Controlling Access to Licensing Operations : Add, change or remove the

licensing password ...

For each License ID, a password can be set and required for some or all of the licensing operations. If you're licensing an application on a home-resident system, this feature is likely not needed. However, if your system is located in a non-secure environment and/or you are managing a collection of corporate systems, this feature should be used, especially when you are using the stored License ID feature on systems located in a non-home environment.

Once a password is setup for a given License ID, any password-protected licensing operation that involves that License ID will be preceded by a password check. To recover from a forgotten password, please contact us via www.derman.com. We suggest that you use the Keychain application to securely store passwords so you don't lose them.

To setup a password or to alter the current password setup:

- As required by the licensing operation you want to perform, either supply a **License ID** or clear the **License ID** entry to specify the License ID previously used to license this application on this system.
- Select/check the **Add, change or remove the licensing password for this License ID** checkbox.
- Press a button to perform any licensing operation (**Activate**, **Show Licensing Information**, etc.).

Prior to performing the licensing operation, a drop-down window is presented that enables you to setup a password and its applicability (which may first be preceded by a password check if a password is already setup):

PasswordSetup.gif "

The following setup options are available:

- **Set or change the licensing password:** When checked allows a password to be supplied or changed.
- **Type Password** and **Re-type Password:** Captures the password you want to be set. Both entries must be the same (helps detect any typing errors).
- **Activate**, **De-Activate** and **Re-Activate:** When checked will cause a password to be required before performing license activations, de-activations and re-activations, respectively. Generally, unchecking re-activations is "safe" because it's only allowing something that was already valid (i.e.,

allowing the re-licensing of an application that was already licensed for this system).

- **Show Licensing Information or Add Onto or Upgrade Licenses:** When checked will cause a password to be required before showing the licensing information and before allowing the licenses to be added onto or upgraded. Showing the licensing information is part of the add-on and upgrade process.
- **Remove Password:** When pressed, (ignores the above settings and) removes the password requirement for that License ID.
- **Store License ID and Remove Stored License ID:** When checked will cause a password to be required before a stored License ID can be created or removed, respectively.
- **Cancel:** When pressed, cancels both the password setup and the requested licensing operation.
- **Setup Password:** When pressed, will define the password setup as specified via the above settings.

Reviewing Your Licensing Information : Show Licensing Information

You can review the licensing information for any License ID, Upgrade ID or an Add-On ID by supplying the ID then pressing the **Show Licensing Information** button. If you leave the **License ID** entry blank, the status will be shown for the License ID used to activate the current license for this application on this system.

A licensing operation password may be required to perform the **Show Licensing Information** operation. For more information, see the ***Controlling Access to Licensing Operations*** section.

The **Licensing Information** panel can show:

- **For License IDs:** the License ID, a description, the kind of ID (i.e., License ID), the total number of licenses included in the License ID, the number of licenses currently available for activation, and the number of licenses currently activated.
- **For Upgrade IDs:** the Upgrade ID, a description, the kind of ID (i.e., Upgrade ID), the total number of license upgrades included in the Upgrade ID, the number of license upgrades currently not applied, the number of

license upgrades already applied and the date(s) that license upgrades were applied.

- **For Add-On IDs:** the Add-On ID, a description, the kind of ID (i.e., Add-On ID), the total number of license add-ons included in the Add-On ID, the number of license add-ons currently not applied, the number of license add-ons already applied and the date(s) that license add-ons were applied.

The **Licensed Systems** panel shows the kind of computer, the model of computer and the Primary Ethernet ID for the computer.

For example, the **Licensing Information** panel could show:

1__#\$!@%!#__AddOn-5.gif "

and the **Licensed Systems** panel could show:

LicensedSystems.gif "

Multiple-Systems Administration

As documented in the *Storing License IDs* section, *LicenseControl* will allow you to create or remove a stored License ID. In addition to being useful on a personal-system level, stored License ID can also be used:

- when creating a "distribution image" that is used to deliver standardized, installed systems
- when distributing a License ID to existing systems so users can easily license their application without having to be given a visible copy of the (company's) License ID
- to keep the applicable License ID with the system upon which it's used, especially useful to avoid always having to go "back to the list of what's where" when managing multiple systems

A stored License ID is most useful if you have a multi-license License ID (i.e., a License ID that includes multiple licenses) and/or you manage a significant number of systems.

Distributing a Stored License ID

Once you have created a stored License ID it can be distributed either by creating a distribution image (e.g., using netboot or cloning strategies) or by distributing the

file in which the stored License ID is contained.

To distribute the file in which a stored License ID is contained:

- locate the stored License ID file for the applicable application—the directory /Library/Application Support/LicenseControl/ will contain a ".<32-digit hex>.lid" file that was created to hold the stored License ID (if there are multiple stored License ID files, you'll need to identify the applicable one by the file's timestamp)
- copy/distribute the stored License ID file to the applicable systems—note that this can be done either before or after the application is installed and/or licensed

Warning: You must duplicate the permissions and be careful to copy *only* the ".<32-digit hex>.lid" file from the "/Library/Application Support/LicenseControl/" directory, creating the directory if it does not exist. Getting the permissions incorrect and/or copying other files from that directory will likely cause licensing failures.

Note that it is best to clone a system upon which the application(s) have not been licensed. If you are delivering cloned systems, by whatever method, the user will still need to press the **Activate** button to license the application the first time it is run on a given system.

Licensing Security

Although the stored License ID is encrypted, the file is still usable by anyone. Therefore, this strategy should be used in conjunction with password-protected licensing operations. In most environments, it will make sense to password all licensing operations except the Re-Activate operation. See the ***Controlling Access to Licensing Operations*** section, for more detail.

Although you can password-protect the ability to apply Upgrade and Add-On IDs, it would still be possible for anyone who has access to a valid License ID to apply any (compatible) Add-On or Upgrade ID. License, Upgrade and Add-On IDs should be handled with an appropriate level of security, given your environment.

2_#\$_!@%!#_BlueLine.gif ``

Menus

LicenseControl has a small number of menus and only a few items within those menus that bear mention.

LicenseControlMenu.gif "

About LicenseControl: Presents version and copyright information.

Show Licensed Applications: Shows the applications that are currently licensed by *LicenseControl* on this system. This can be especially useful to know which applications need their licenses de-activated when preparing to change systems.

Quit LicenseControl: Exits the embedded *LicenseControl* application.

HelpMenu.gif "

LicenseControl Manual: Presents this documentation.

LicenseControl ReadMe: Presents documentation for *LicenseControl* usage scenarios.

3__\$!@%!#__BlueLine.gif "

Tooltips

LicenseControl presents tooltip-style help whenever the cursor is stationary, for the required duration, over an item. The following is an example of tooltip-style help:

ExampleTooltip.gif "

Acknowledgments

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LicenseControlName.gif "

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