Customer Operations Manager Guide to TenAsys License Administration
# Table of Contents

1. **Introduction** .................................................................................................................. 2
2. **TenAsys Software License Process Concepts** ................................................................. 3
3. **TenAsys License Portal option selection guide** .............................................................. 5
   3.1 **TenAsys License Portal Login options** ....................................................................... 5
       3.1.1 Accounts .................................................................................................................. 5
       3.1.2 Customer Operations Manager Account .................................................................. 5
       3.1.3 With Entitlement ...................................................................................................... 6
       3.1.4 With Delegate User account .................................................................................. 6
   3.2 **Options to obtain a Node-locked License** .................................................................... 7
       3.2.1 Graphical User Interface ......................................................................................... 7
       3.2.2 Command Line ....................................................................................................... 8
       3.2.3 TenAsys License Portal .......................................................................................... 8
       3.2.4 Field Service Considerations .................................................................................. 8
   3.3 **How to obtain a USB/CID Key Deployment License** .................................................. 8
4. **TenAsys Customer Operations Manager Guide** ............................................................. 10
   4.1 Login ............................................................................................................................... 10
   4.2 Obtaining a license as Customer Operations Manager .................................................. 12
   4.3 Manage Delegate User accounts ................................................................................... 15
   4.4 Finding Entitlements or License Strings ........................................................................ 17
   4.5 Finding License String/Code for USB/CID keys ............................................................ 19
   4.6 Exporting License data ................................................................................................. 21
5. **TenAsys Delegate User Guide** ....................................................................................... 22
   5.1 Login ............................................................................................................................... 22
   5.2 Obtaining a license as Delegate User ............................................................................. 23
   5.3 Finding License Strings for USB/CID keys .................................................................... 25
1 Introduction

TenAsys licensing policy is designed to protect TenAsys intellectual property from illegal copying or unauthorized use.

This document outlines the processes that have been put in place to support the license protection schemes and to manage purchased deployment licenses and options to obtain the license. A single person, most often the Customer Operations Manager of the company, should have this role. This person has a login and password to determine how licenses are obtained during INtime deployment installation.

- Section 2 defines key license components – this is a reference.
- Section 3 details the various options for obtaining a license with the license portal. This is a decision guide to select the best option for your operation. Please give this selection some thought because changing your selection may have implications that make subsequent changing difficult.
- Section 4 provides step-by-step instructions for using the license portal as the Customer Operations Manager.

Go to section 4 for TenAsys License Portal login instructions.

This guide covers new capabilities. We therefore welcome you to contact us if you are experiencing difficulties in executing the prescribed processes:

**By website:**  
www.tenasys.com/my-tenasys/create-support-case/  
www.tenasys.com/contact_us/enquiry/

**By email:**  
sales@tenasys.com  
Or:  
license@tenasys.com  
Or:  
support@tenasys.com

**By phone:**  
International:  +1 (503) 748-4720  
USA toll free:  +1 (877) 277-9189  
Between the hours of 8:00 and 17:00 hours  
PST/PDT - Pacific Standard/Daylight savings Time (UTC -8/-7)

**Europe:**  +49 (89) 45 46 9 47 - 0  
Between the hours of 8:00 and 17:00 hours  
CET/CEST – Central European [Saving] Time (UTC +1/+2)
2 TenAsys Software License Process Concepts

Basic license access flow:

- **Deployment host** – the computer on which TenAsys software is desired to execute and a corresponding license created and applied.
- **Development host** – the computer on which TenAsys SDK software is installed and a corresponding license created and applied.
- **USB/CID key** – a USB dongle-based license. Note that a USB/CID key and license pair can be used on any host eliminating the need for future host license cycles. Licenses based on a USB/CID key are transferrable between hosts.
- **Entitlements** – the purchased rights to obtain a license for any given host. Entitlements are stored and managed by the TenAsys License Portal accessed via the internet. Entitlements were previously called SUACs.
- **Fingerprint** – the obfuscated details a given host which is used to create a corresponding license.
- **License string** – the string created by the TenAsys License Portal which enables TenAsys software to execute on a designated host.
- **License Code** – the string provided on a license card for USB/CID keys.
- **License Manager applet** – in the INtime Configuration Panel, also referred to as licman.exe.

**Definitions:**
Identifying license components:

Fingerprint: ---- BEGIN HOST INFO ----<ascii> ---- END HOST INFO ----

Entitlement: 8digits-4digits-4digits-4digits-12digits<32 Hexadecimal digits total>
01234567-89AB-CDEF-0123-456789ABCDEF

Used once to activate a node-locked license from the TenAsys license portal.

License String: [*]<alphanumeric license string>[# “16” version “”, no expiration date, exclusive]
Located in the %INTIMECFG%lservrc file after activation.

- A<alphanumeric license string> = Classic License used for USB/CID keys without Vendor License GUID
- *A<alphanumeric license string> = License used for node-locked license without Vendor License GUID
- *I <alphanumeric license string> = License for INtime for Windows 7+ with Vendor License GUID
- *H <alphanumeric license string> = License for INtime Distributed RTOS 7+ with Vendor License GUID

License Code: 5x<6 alphanumeric characters> separated by dashes
Also known as the Combined Development License code (CMBL).
120004-9K9A70-9K9A70-EXJ05Q-EXJ05Q
Used to activate a USB/CID Key. Expands into a classic License String.

Process steps in provisioning hosts to be made ready for use.

1. **Obtaining entitlements** – According to the sub-licensing agreement, TenAsys customers must procure the appropriate license products for deployment of their application. TenAsys license products are sold only to TenAsys customers. End users, or any other entity other than the TenAsys customer, may not procure licenses from TenAsys unless specifically designated by the TenAsys customer (e.g. their contract manufacturer).

2. **Obtaining fingerprint or USB/CID key data** – TenAsys products provide the means to acquire a copy of the fingerprint for the purpose of managing host licenses. Some licensing options will automatically transfer the fingerprint data. Other options require the collection of the fingerprint to be transferred to the TenAsys License Portal.

3. **Obtaining the license** – Is completed when both entitlement and fingerprint are presented to the TenAsys License Portal resulting in the creation of the license string corresponding to the host from which the fingerprint data was acquired.

4. **Installing the License String/Code** – Is accomplished by either importing the License String or License Code using the license manager applet on the host or saving the License String to the designated LSERVRC file located in the %INTIMECFG% directory.
3 TenAsys License Portal option selection guide

3.1 TenAsys License Portal Login options

3.1.1 Accounts
There are two different types of accounts for each TenAsys customer:

- Customer Operations Manager account
- Delegate User account

3.1.2 Customer Operations Manager Account
There is a single Customer Operations Manager login for each TenAsys customer account. This Customer Operations Manager determines how each purchased license is obtained for a deployment host.

There are two basic Entitlement management methods:

1. Obtaining a license using an Entitlement (Recommended)
2. Obtaining a license using a user account (either the Customer Operations Manager or Delegate User)

There are also three options to obtain a license:

1. Interactive option within the License Manager applet for INtime for Windows or the web-based interface for INtime Distributed RTOS.
2. Licman command line option suitable for including in a script
3. TenAsys License Portal for off-line deployment hosts

3.1.2.1 Entitlement management methods
The two basic Entitlement management methods: using Entitlements (was SUAC) or using user accounts, both existed on the Legacy License Portal and are preserved with compatibility with the TenAsys License Portal.

1. Entitlement provided by the Customer Operations Manager. This is the preferred method to control each Entitlement and should be used when providing a license to a third party.
2. With a Delegate User account. All license installations are done with a Delegate user account where the Delegate User (or script) logs in with a login and password set by the Customer Operations Manager with the TenAsys License Portal. The Delegate User selects the product from the available Entitlements.
3. A mix of the two methods is not supported at this time. An Entitlement provided to a SW installer might be used by a second SW installer using a Delegate User account before it is used by the first SW installer. Entitlements are not reserved.

The Customer Operations Manager provides Entitlements to the SW installer, if the Entitlement method is used. No credentials are needed.

The Customer Operations Manager creates logins for trusted Delegate Users if the Delegate User account method is used.
To change the default in the License Manager applet from a prompt for a Delegate User account to prompt for an Entitlement do one of the following:

1) Click **Go to Entitlement** in the login page.
2) Install INtime with the command line option: “AUTHCODEACTIVATION=1”.
3) Create a file named “LicmanConfig.txt” in the %INTIME%bin directory with the single line: “ActivationType=entitlement”. The default is “ActivationType=login”. If this file does not specify the action, it is determined by the registry value as described in the KB article: Configuring INtime for Windows to prompt for ‘Internet Activation’

Obtaining a license can be done by the Customer Operations Manager directly. The Customer Operations Manager account can be used as a Delegate User account.

### 3.1.2.2 Options to obtain a license

There are 3 options for obtaining a license:

1. The License Manager applet in the INtime Configuration Panel for INtime for Windows or the web-based interface for INtime Distributed RTOS. This is the easiest option. It requires interaction by the SW installer and a connection to the Internet.
2. Command Line (for scripting) is the choice when the installation process is automated, and the host is connected to the Internet.
3. License Portal (for off-line hosts) requires more steps and supports obtaining a license for hosts that are not connected to the Internet.

### 3.1.2.3 Entitlement management summary

The Customer Operations Manager can view and download the status of each purchased Entitlement. If the Entitlement has been used, the License String, option used, comment, and other information is available. With this access, the Customer Operations Manager can manage the process of obtaining a license.

<table>
<thead>
<tr>
<th>Host connected to internet?</th>
<th>Node-locked options:</th>
<th>With Delegate User account</th>
<th>With Entitlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>Interactive License Manager</td>
<td>Appendix 1</td>
<td>Appendix 2</td>
</tr>
<tr>
<td>YES</td>
<td>Command line (script)</td>
<td>Appendix 3</td>
<td>Appendix 4</td>
</tr>
<tr>
<td>NO</td>
<td>TenAsys License Portal</td>
<td>Appendix 5</td>
<td>Appendix 6</td>
</tr>
</tbody>
</table>

USB/CID key locked: Appendix 7

The Appendix references apply to each product: INtime for Windows and INtime Distributed RTOS in the licensing procedure documents for each. These appendix documents can be found on the Policies page on the TenAsys.com website.

### 3.1.3 With Entitlement

An Entitlement is used to obtain a license for a deployment host. Each Entitlement is for a specific purchased license type, so no license type selection is required or possible. The use of the Entitlement method is recommended to provide control of each license.

### 3.1.4 With Delegate User account
A Delegate User account is used by the INtime installer to obtain a license for a deployment host when an Entitlement is used from the pool of Entitlements without individual selection. This method allows a selection between license types of all available Entitlements. It is not possible to restrict a Delegate User account to one product when multiple products are available. This option should only be used for trusted Delegate Users.

The Customer Operations Manager must decide which method is used:

1) Entitlement method

2) Delegate User account method

Using both methods on one account is not supported at this time. If both methods were to be used, the Delegate User account could consume an Entitlement that has been distributed but not yet consumed. The Delegate User account method does not provide for individual Entitlement selection.

### 3.2 Options to obtain a Node-locked License

Node-locked deployment licenses are not recommended for hosts configured to use RAID. Some system vendors configure the BIOS for RAID, even if the system does not use RAID. The node-locked license will be invalid after reloading the Windows OS.

Purchase a USB/CID key deployment license to ensure the license remains valid after any system change. It is a small investment to improve future system maintenance.

A license must be obtained for every deployment host because the node-locked license string is unique for each deployment host.

There are three ways to obtain a license. Each of these three ways can use either option: with Delegate User accounts or with Entitlements.

The Appendix references below are intended for the SW installer and apply to each product: INtime for Windows and INtime Distributed RTOS in the licensing policy documents for each. Please use the appropriate document as the screen shots and procedures vary. These appendix documents can be found on the Policies page on the TenAsys.com website.

#### 3.2.1 Graphical User Interface

The License Manager applet is the default option of obtaining a license for INtime for Windows. A web-based interface is provided for INtime Distributed RTOS. The deployment host must be connected to a network that has access to the internet and the GUI provides guidance through the process.

See Appendix 1 for detailed instructions on how to obtain a license with a Delegate User account using a Graphical User Interface.

See Appendix 2 for detailed instructions on how to obtain a license with an Entitlement using a Graphical User Interface.
3.2.2 **Command Line**
The command line option is used when it is desired to obtain a license using an automated script or command line.

See Appendix 3 for detailed instructions on how to obtain a license with a Delegate User account using a licman command line script.

See Appendix 4 for detailed instructions on how to obtain a license with an Entitlement using a licman command line script.

3.2.3 **TenAsys License Portal**
This process is for users that cannot or do not want to have the deployment host connected to the internet for security or other reasons. The process consists of capturing a “fingerprint” from the deployment host and copying this “fingerprint” to a computer that has access to the internet. Open the TenAsys License Portal at [license.tenasys.com](http://license.tenasys.com) in an internet browser to use an Entitlement or to use a Delegate User account. The page contains an option to switch modes. Provide the “fingerprint” to the TenAsys License Portal. Copy the returned license string onto the deployment host.

See Appendix 5 for detailed instructions on how to obtain a license with a Delegate User account using the TenAsys License Portal.

See Appendix 6 for detailed instructions on how to obtain a license with an Entitlement using the TenAsys License Portal.

3.2.4 **Field Service Considerations**
Every deployment node-locked license is for a specific deployment host and is not transferable. Replacing a deployment host will require the purchase of a new deployment node-locked license. Changing part of the deployment host, such as the hard disk drive, will invalidate the node-locked license for that deployment host. A new node-locked license for the deployment host will need to be generated using one of the listed options. Therefore, we recommend the purchase of a USB/CID key deployment license.
Node-locked deployment licenses are not recommended for hosts configured to use RAID. Some system vendors configure the BIOS for RAID, even if the system does not use RAID. The node-locked license will be invalid after reloading the Windows OS. Purchase a USB/CID key deployment license to ensure the license remains valid after any system change. It is a small investment to improve future system maintenance.

3.3 **How to obtain a USB/CID Key Deployment License**
Users that wish to have the additional copy protection security of a hardware key as well as the means of being able to swap out hardware in the field with no license interruption can purchase a USB/CID key deployment license. Retrieving a license can be done off-line making this option attractive for secure locations. The license uses a USB/CID key and a corresponding License String or License Code.

The Appendix reference below is intended for the SW installer and applies to each product: INtime for Windows and INtime Distributed RTOS in the licensing policy.
documents for each. Please use the appropriate document as the screen shots and procedures vary.

See Appendix 7 for detailed instructions on how to retrieve a USB/CID key deployment license.
4 TenAsys Customer Operations Manager Guide

4.1 Login

Open a browser on an internet connected deployment host to license.tenasys.com/login, the TenAsys License Portal.

Enter the Customer Operations Manager account Username and Password established on the account at TenAsys. There is only one login per customer account that is designated as the Customer Operations Manager. The current Customer Operations Manager can find their Username and Initial Password when logged in to the TenAsys.com website, on the My Account page. The Username is the email address listed as the Operations Manager Contact. The Initial Password is listed just below Operations Manager Contact.

Click Proceed
On the first login, a prompt might appear prompting to update the password. The password can be changed at any time with the “Change Password” link in the menu dropdown on the right side of the header.
The account page shows the number of **Total** and **Available** Entitlements for each product. The difference is the number of Entitlements already used. USB/CID key licenses are created before the keys are issued and shown on separate lines with **-KEY**.
4.2 Obtaining a license as Customer Operations Manager

If the Entitlement method is used, skip this section. Using the process in this section can make an Entitlement that has been provided to a user unavailable to them.

After logging in, the Customer Operations Manager can obtain a license with Create License.

This is the same procedure as obtaining a license with a Delegate User account using the TenAsys License Portal as described in Appendix 5, License Portal with a delegate user account.

Note that USB/CID key based license strings are created before the keys are issued. See the section: Finding License Strings for USB/CID keys.

The next screen prompts for a Fingerprint and a comment. Note that this is only one of six different options to obtain a node-locked deployment license. Each option has advantages and disadvantages.

Paste the fingerprint and add a comment which is provided for your tracking. This should be a unique string identifying the deployment host.
Then click **Create License**.
An Entitlement is consumed and a license is generated.

If a license was already created for this host, do not use Create License again as it will consume an additional Entitlement. Recover the previously created license from the Entitlements page.
Use either **Copy License** or **License File** to capture the license.

If the license is not saved with **Copy License** or **License File**, the license can be recovered by the Customer Operations Manager from the Entitlements page.

Move this License String or License File to the deployment host to enter the string or file into the License Manager applet.
4.3 **Manage Delegate User accounts**

To add or delete Delegate User accounts, click *Manage Users* from the Customer Operations Manager home page. The Delegate User accounts are used to obtain a license for a deployment host.

If the Delegate User account method is not used, skip this section.

A unused Entitlement is consumed for each licensed deployment host. If unused Entitlements exist for more than one product in the account, the Delegate User selects the desired product. Do not provide a Delegate User account login outside your organization. There is no limit for the number of Entitlements consumed from a Delegate User account. Use this method for enabling production without the need to manage individual Entitlements. Use the Entitlement method to maintain control of Entitlement assignment. It is not possible to use both methods on the same account.

Click **Add** to add a new Delegate User.
Copy and retain the Temporary Password to provide to the new Delegate User. Enter the new Delegate User’s name, and email, then click **Save**.

Click **Remove** to remove a Delegate User. A notice in the header confirms the removal. Click **Reset Password** to reset a Delegate User’s password.

A new temporary password is generated. Provide this password to the Delegate user. When the Delegate User first uses this password to log in, they will be prompted to change their password.
4.4 **Finding Entitlements or License Strings.**

From the Customer Operations Manager home page:

To view Entitlements, click **Entitlement Details**.

Note that clicking on an Entitlement or some other element in the table will open a copy pop-up showing more of that element and the option to **Copy** or **Close** the pop-up. Using this option allows the pasting of the element into another application. This is useful to retrieve unused Entitlements and License Strings.

Some columns can be sorted by clicking the column title that shows an arrow when hovered over.

The Filters provide a way to narrow the list to the entry of interest.
The **Search Text** filter line shows only lines that match the text on limited columns.

The three filter selectors provide a quick way to narrow down the list of Entitlements. The first filter: **Filter Product** selects from the available products. The second filter: **Filter Licensed** selects from All, True, or False to show only used or unused Entitlements. The third filter: **Filter Lock Style** selects from All, USB/CID Keys, or Node Locked to show Entitlements for USB/CID or Node Locked only. All four filters can be used at the same time to find the Entitlement of interest.
4.5 Finding License String/Code for USB/CID keys

USB/CID key locked licenses strings are created before the keys are issued. The License Strings are in the account database. The License String/Code is unique for each USB/CID key. There are 4 ways to obtain the License String:

1. The License Code as well as a QR link is provided on the license card provided with the USB/CID key. See Appendix 7 for details.

2. Without the license card, open a browser to `license.tenasys.com/qr` and Use the Username and Password of the Operations Manager or a Delegate User along with the USB/CID Deployment Host Key serial number to obtain the USB/CID Deployment Host Key Enhanced License String or License Code. The Enhanced License String includes the Licensing Identifier GUID in INtime 7 and later. See the INtime License Library for details.
3. The License String/Code for a given USB/CID key can also be found by the Customer Operations Manager or Delegate User (see section 5.3) by using the search window on the Account page:

![Image of License Page]

4. Use the search capabilities in the Entitlement Details page with the Filter Lock Style set to **USB/CID Keys**. To find the License String for the USB/CID key:

1. Enter the 4 or 5 hex digit USB/CID key serial number in the **Search Text** filter (arrow 1).
2. Select **USB/CID keys** (arrow 2) to eliminate other license lock styles.
3. The matching USB/CID keys are shown (bubble 3).
4. Click the License (arrow 4).
5. Copy the License String with **Cop** in the pop-up.
4.6 **Exporting License data.**

The Customer Operations Manager can also retrieve a list of all of the License Strings in a spreadsheet using **Download License Data**.

If there are many records, the download will be split into multiple parts.

All of the information can be viewed in a spreadsheet application.
5 TenAsys Delegate User Guide

5.1 Login

Open a browser on an internet connected deployment host to license.tenasys.com/login, the TenAsys License Portal.

Enter the Delegate User account Username and Password established by the Customer Operations Manager. The current Customer Operations Manager creates the users and passwords when logged in to the license.TenAsys.com website.

Click Proceed
The password can be changed at any time with the link in the header.

The account page shows the number of Total and Available Entitlements for each Product.
The difference is the number of Entitlements already used. USB/CID key licenses are created before the keys are issued and shown on separate lines with -KEY.
5.2 Obtaining a license as Delegate User

The use of Entitlements is recommended over Delegate User accounts.

After logging in, the Delegate User can obtain a license by clicking Create License.

This is the same procedure as obtaining a license with a Delegate User account using the TenAsys License Portal as described in Appendix 5, License Portal with a delegate user account.

Note that USB/CID key based license strings are created before the keys are issued. See the next section: Finding License Strings for USB/CID keys.

The next screen prompts for a Fingerprint and a comment. Note that this is only one of six different options to obtain a node-locked deployment license. Each option has advantages and disadvantages.
Paste the fingerprint and add a comment which is provided for your tracking.

Then click **Create License**.

An Entitlement is consumed and a license is generated.

Use either **Copy License** or **License File** to capture the license. Move this License String to the deployment host to enter the string or file into the License Manager applet. If the license is not saved at this point, it is available to the Customer Operations Manager in the Entitlements page.
5.3 Finding License Strings for USB/CID keys.

USB/CID key locked license strings are created before the keys are issued. The License Strings are loaded into the account database. The License String is unique for each USB/CID key.

The License String can be retrieved by using a Delegate User account. Enter the 4-5 hex digit USB/CID serial number on the page after login.

Clicking Download downloads a CSV file with the License String(s) for the USB/CID serial number. There may be more than one USB/CID key with the same 4-5 hex digit serial number. Find the line in the CSV file that matches the entire serial number.