



INtime[®] Distributed RTOS Licensing
Appendix 7
with CID key
Procedure
INtime 7



Appendix 7 – USB/CID Key license installation

USB/CID key license installation consists of installing a license string or file using **Install license...** in the built-in web server interface or the **Licman** command in INshell. Each USB/CID key has a unique corresponding License String. Steps below go through the procedure.

Step by Step USB/CID Key license installation Example

Use this procedure to enter the License String.

Obtain the License String for the USB/CID key

License Card

Each USB/CID key is provided with a USB/CID specific URL in a QR code. Use this URL in a web browser to obtain the unique License String for that specific USB/CID key.

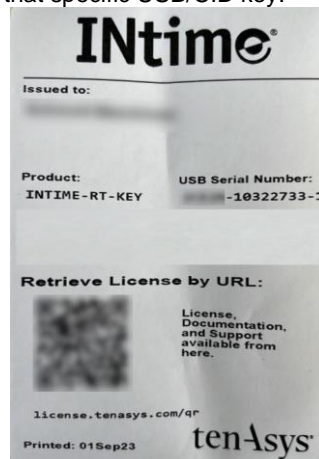


Figure 7.1 – USB/CID License Card

Operations Manager or Delegate User

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 License String.

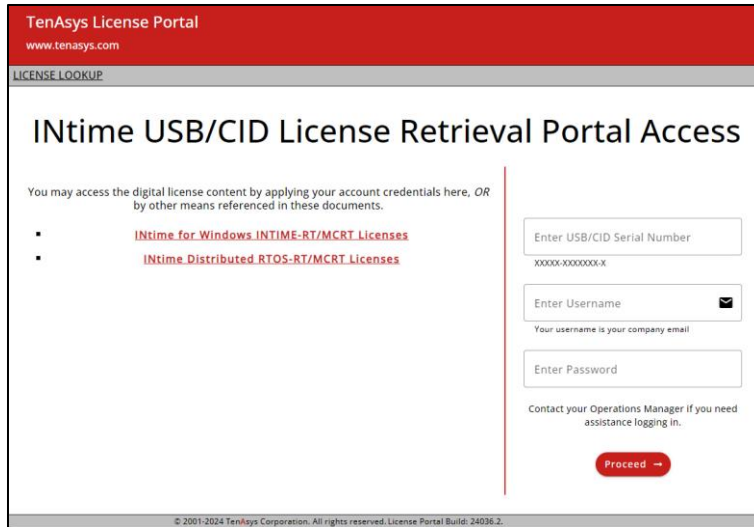


Figure 7.2 – license.tenasys.com/qr page

Delegate User or Operations Manager

If a Delegate User license account Username and Password was provided by your Operations Manager, or the Operations Manager themselves can use the TenAsys License Portal to obtain the USB/CID Key License String.

Open a browser to <http://license.tenasys.com/login>, the *TenAsys License Portal*.

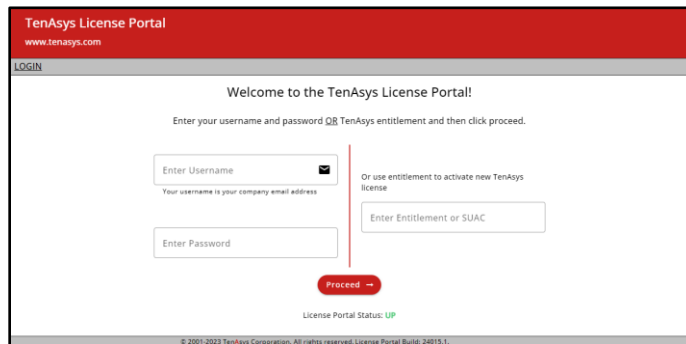


Figure 7.3 – TenAsys License Portal

Enter the Username and Password, then click **Login**.

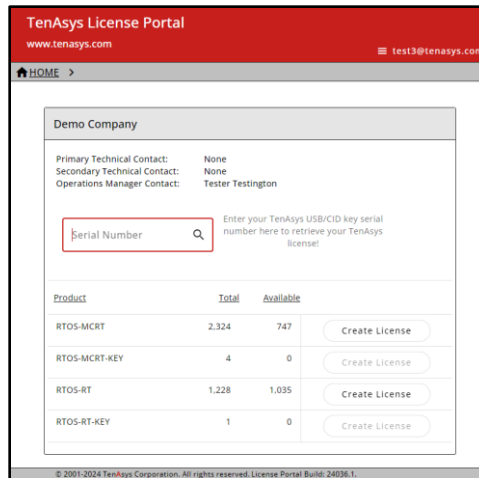


Figure 7.4 – USB/CID Serial Number entry

Enter the USB/CID Serial Number, then click the search icon. Click **Download** for 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.

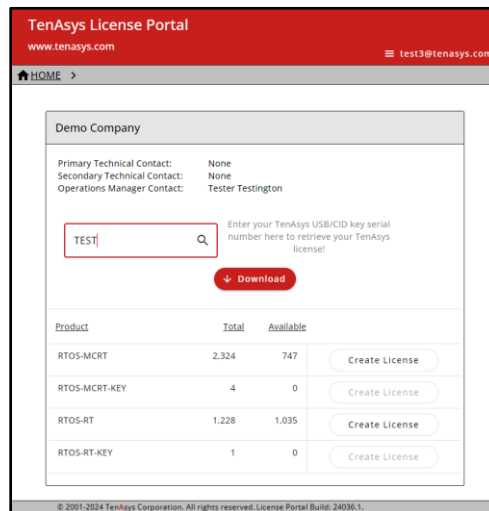


Figure 7.5 – Download

Operations Manager

The Operations Manager can search for the USB/CID serial number in the Operations Manager interface, covered in the Customer Operations Manager Guide.

Install the license

Installation of a license is performed with either:

- INshell on the INtime Distributed RTOS console.
- The built-in web server on INtime Distributed RTOS. Access the web server interface by entering the IP address from the installation configuration of the target host or from the startup screen at boot time if the host was set to obtain an IP address via DHCP as shown in the example screen below to any browser on a host on the local network.
- INshell from the built-in web server on INtime Distributed RTOS.

Using INshell

(Either on the RTOS console or with INshell on the built-in web server): after transferring the license file to the INtime Distributed RTOS disk with FTP, use the command line:

```
Licman -i:[license.lic]
```

Confirm the installation of the license with the command:

```
license list
```

Using the build-in web server

Find the IP address for the INtime Distributed RTOS host:

```
13 files, 4182656 free (130708 clusters)
init: Initialized licensing system.
init: Loading syslogd
init: Loading USB stack
init: License check...
init: Failed to acquire license.
init: Loading network
dhclient: rtl1g0: no link ...
dhclient: rtl1g0: no link ...
dhclient: rtl1g0: no link ...
dhclient: rtl1g0 got link
dhclient: DHCPDISCOVER on rtl1g0 to 255.255.255.255 port 67 interval 2
dhclient: DHCPOFFER from 192.168.1.1
dhclient: DHCPREQUEST on rtl1g0 to 255.255.255.255 port 67
dhclient: DHCPACK from 192.168.1.1
dhclient: New IP Address (rtl1g0): 192.168.1.208
dhclient: New Subnet Mask (rtl1g0): 255.255.255.0
dhclient: New Broadcast Address (rtl1g0): 192.168.1.255
dhclient: New Routers (rtl1g0): 192.168.1.1
dhclient: bound to 192.168.1.208 -- renewal in 43200 seconds.
init: Loading network apps
init: Loading FTP server
init: Loading web server
OrtosCIExtension.rsl loaded
init: Valid license not found.
init: Entering restricted environment to allow for license installation
init: or activation.
init: System will shutdown after 10 minutes.
/>
```

Figure 7.6 - Host boot up screen with the IP address listed.

The host was set up in DHCP mode with the network connection on network device rtl1g0.

An alternative to find the IP address is to use the *INtime Node Management* window on any system on the network shared with the INtime Distributed RTOS target host. The *INtime Node Management* window shows the IP address on the right after selecting the system on the left. Click **Configure over network**.

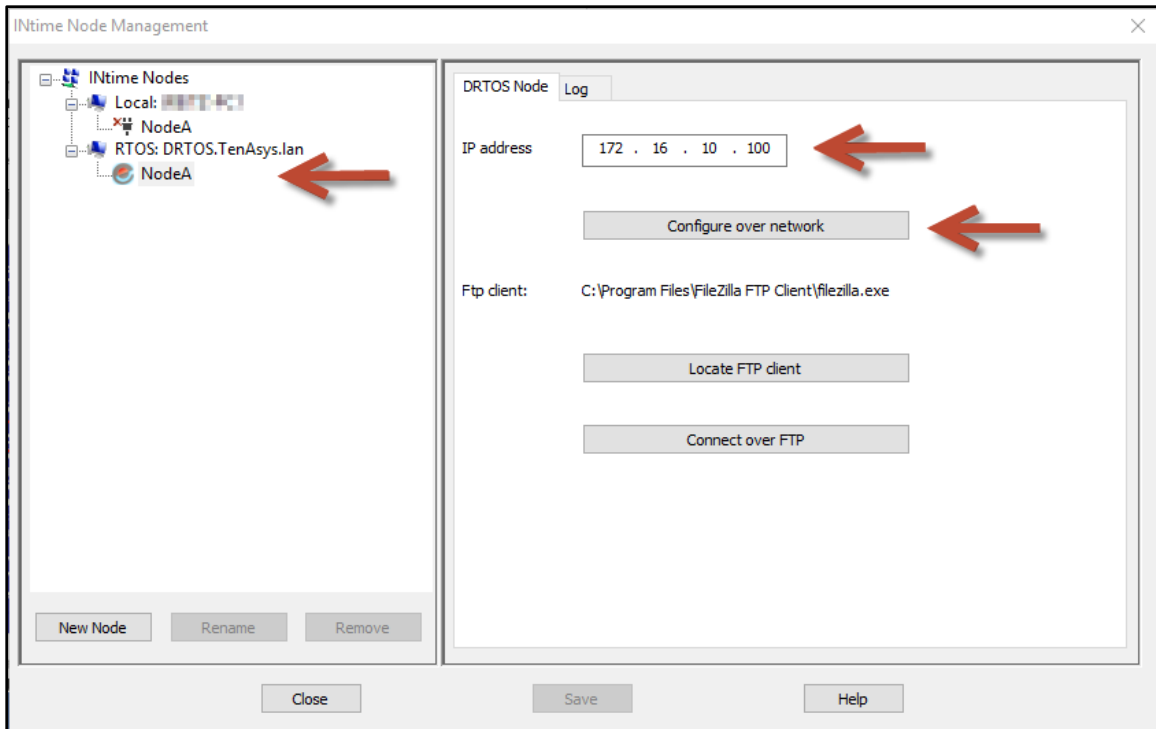


Figure 7.7 – Select the RTOS node with the INtime Node Manager.

Both methods get to the initial INtime distributed RTOS screen from the built-in web server.

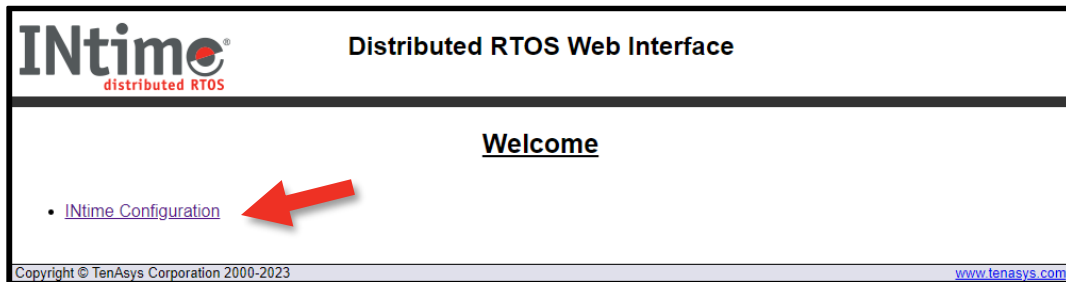


Figure 7.8 – Initial screen from the RTOS web server.

Click **INtime Configuration**.

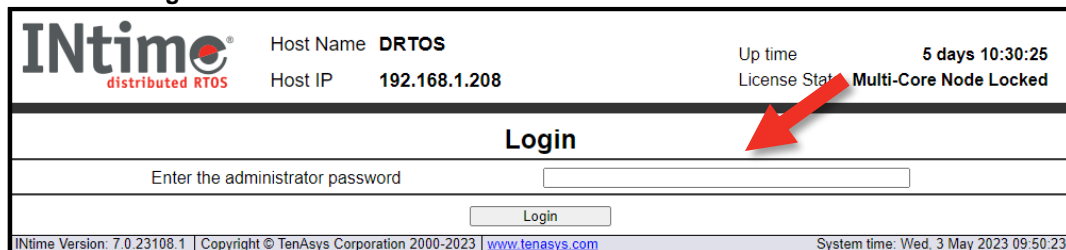


Figure 7.9 - Password screen of the target host's built-in web server.

Enter the target host password set in the installation configuration process. Click **Login**.



INtime distributed RTOS		Host Name DRTOS	Up time 5 days 10:32:15
		Host IP 192.168.1.208	License State Multi-Core Node Locked
Info	System	Nodes	Devices
	Control	Syslog	TPAT
	INshell	License	Admin
Platform Information			
General System Information			
INtime Version / Kernel		7.0.23108.1 / 7.1.23107	
CPU Name		Intel(R) Celeron(R) CPU N3160 @ 1.60GHz Airmont	
BIOS Version		American Megatrends Inc. P1.30H 08/16/2016	
Boot Mode		UEFI	
System Management Mode		enabled and locked	
Real-time Settings			
Hyper-Threading		● not present	
SpeedStep		● present but disabled	
C-states		● C-states are OK	
Hardware Controlled Performance (HWP)		● not present	
<p>There may be features present in this system which affect the real-time performance. You should carefully assess this platform for usage with your application.</p> <p>Hyper-Threading means that two logical processing threads share hardware elements that may result in additional latencies in one thread due to activity by the other thread. We recommend disabling Hyper-Threading for best real-time performance.</p> <p>System Management Mode is enabled on this system. If SMM is activated by means of an SMI then this can seriously affect the response time of the system. However, no SMI has currently been detected by this tool. If you see jitter values in excess of 100 us then this can be an indication that SMIs have occurred.</p>			
INtime Version: 7.0.23108.1		Copyright © TenAsys Corporation 2000-2023 www.tenasys.com	
		System time: Wed, 3 May 2023 09:52:13	

Figure 7.10 - Main screen of the target host's built-in web server.

On the Target INtime Distributed RTOS host: Insert the USB/CID key into a USB port.



Figure 7.11 - USB/CID Key

After transferring the license file to the browser host, open the License page:

INtime distributed RTOS		Host Name DRTOS	Up time
		Host IP 192.168.1.208	License State unlicensed
Info	System	Nodes	Devices
	Control	Syslog	TPAT
	INshell	License	Admin
Licensing			
<ul style="list-style-type: none"> • Activate with entitlement. • Activate with activation account. • Activate manually: get fingerprint. • Activate manually: install license file. • Activate manually: install license string. 			
INtime Version: 7.0.23108.1		Copyright © TenAsys Corporation 2000-2023 www.tenasys.com	
		System time: Wed, 3 May 2023 09:59:56	

Figure 7.12 - License Management window



Download the License String.
Use **Activate manually: install license file** to import the license file.

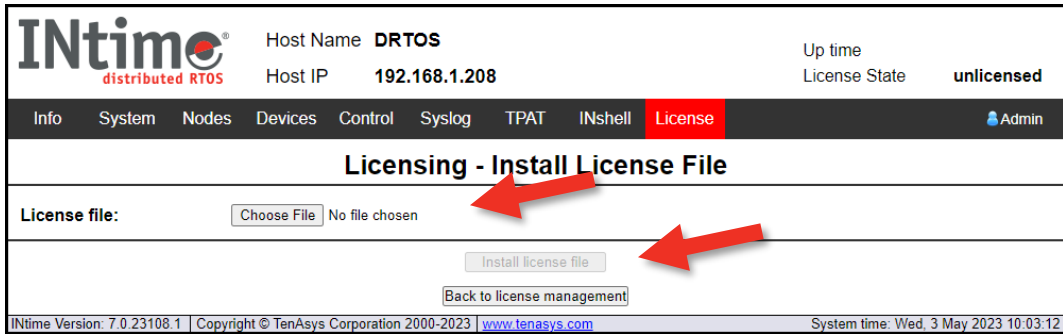


Figure 7.13 – Enter license string window

And select the license file.
Click **Install license file**.
Click **Back to license management** to verify the new license.

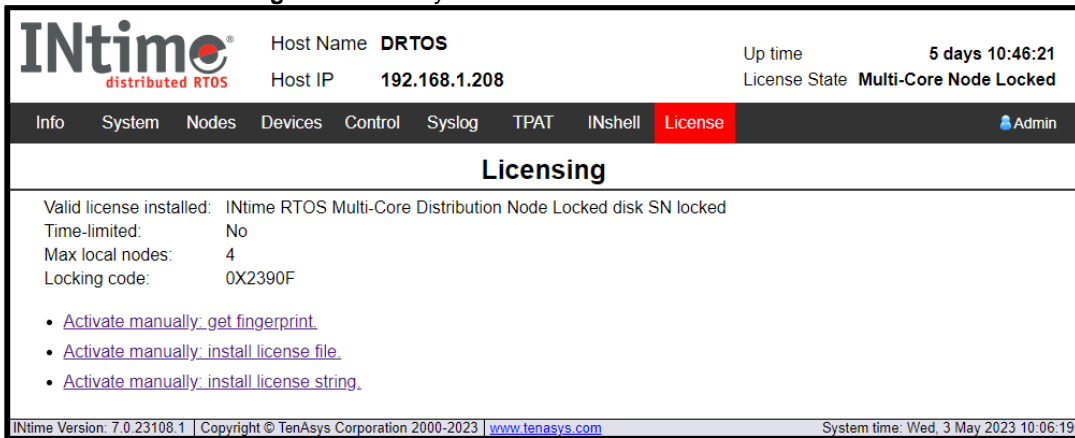


Figure 7.14 – License installed