



INtime[®] Distributed RTOS Licensing
Appendix 6
with Entitlement
using License Portal Procedure
INtime 7



Appendix 6 – with Entitlement using License Portal

Use this procedure to activate with an Entitlement, but without an activation account. The license type is predetermined by the Entitlement.

Identifying license components:

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

Entitlement Code: 8digits-4digits-4digits-4digits-12digits<32 Hexadecimal digits total>

01234567-89AB-CDEF-0123-456789ABCDEF

Used once to obtain a license from the TenAsys license server.

License String: *<ascii license string>[# “16” version “”, no expiration date, exclusive...]

Located in the %INTIMECFG%lservc file.

The license portal method of activation consists of capturing a fingerprint from the target host that needs activation, pasting that fingerprint in the license portal website, saving the returned license file, and loading it on the target host that needs activation using the “Install license...” in the build-in web-server interface or the “Add license...” function in INshell. The details follow.

License Portal Activation Example

Step by Step Automated Activation Example

Activation of the target host can be performed in the first 10 minutes after booting without a license.

Capture the fingerprint

Activation of a target host 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.

1. **Using INshell:** Capture the fingerprint from INshell on the INtime Distributed RTOS console with the command:

license fingerprint

The fingerprint is stored in the /fingerpr.txt file and echoed to the console.

2. **Using the build-in web-server:** first 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
DrtosCIExtension.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 6.1 - 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.

3. An alternative is to use the *INtime Node Management* window on any system on the network shared with the INtime Distributed RTOS target host. If using the *INtime Node Management* window, the IP address is displayed on the right after selecting the system on the left. Click on "Configure over network".

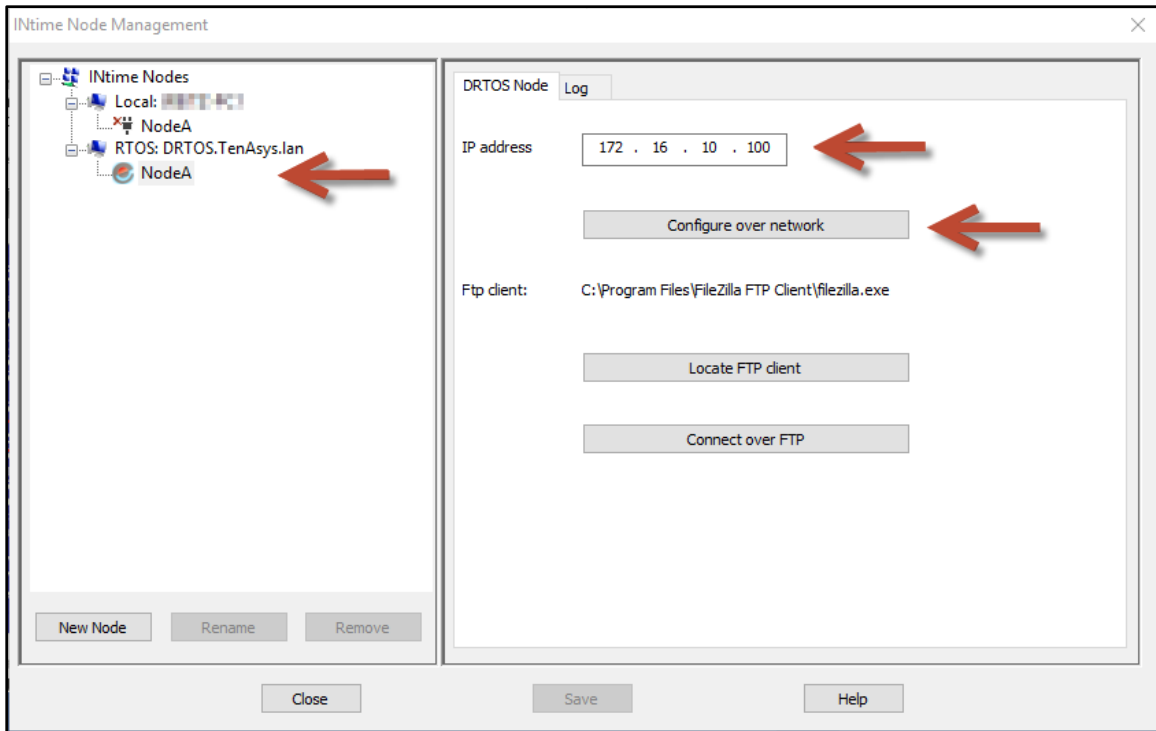


Figure 6.2 – Select the RTOS node with the INtime Node Manager.

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

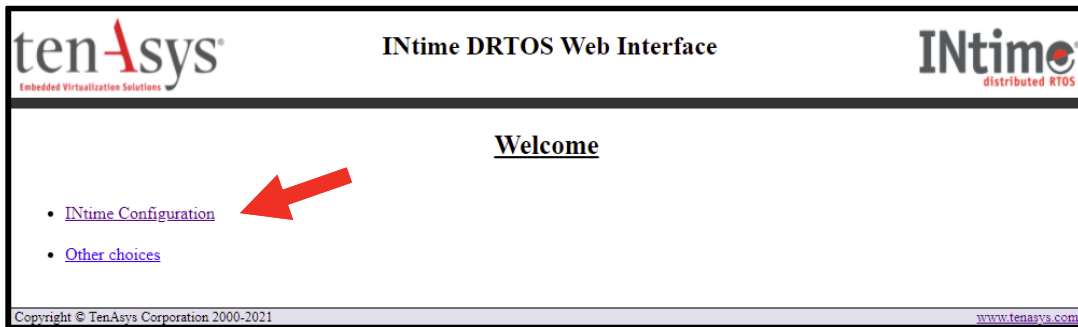


Figure 6.3 – Initial screen from the RTOS web server.

Click on INtime Configuration.

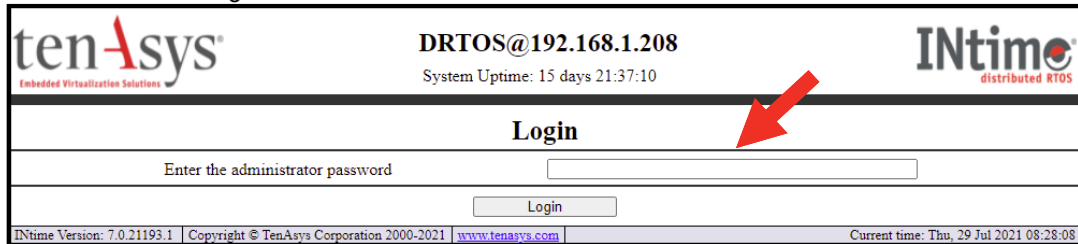


Figure 6.4 - Password screen of the target host's built-in web-server.

Enter the target host password set in the installation configuration process. Click on the “Login” button.

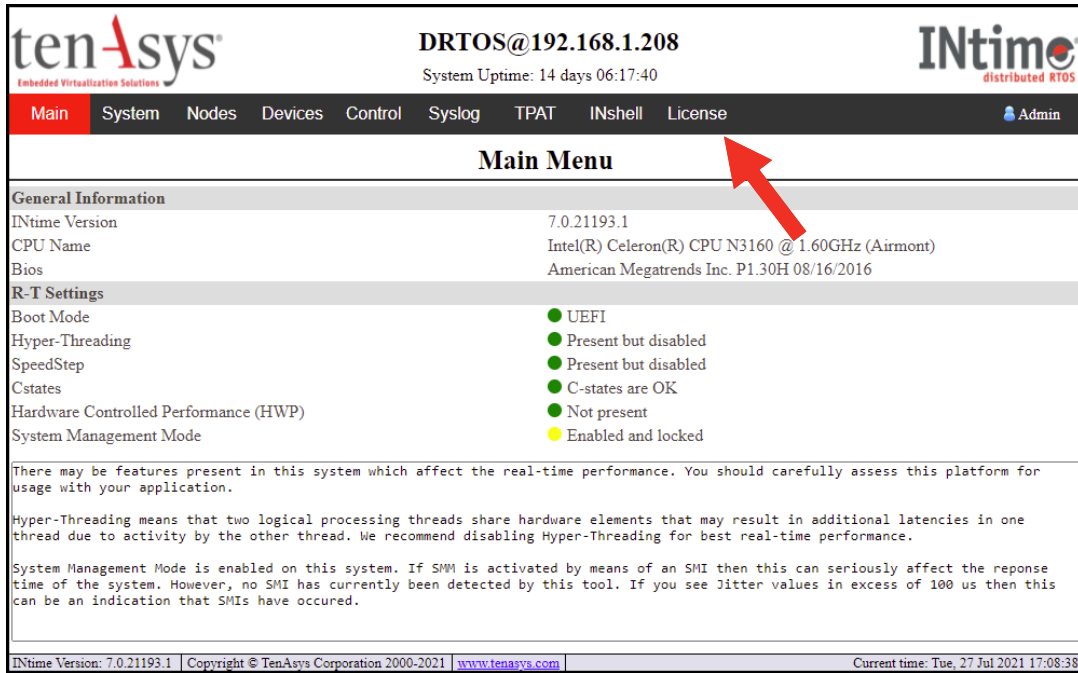


Figure 6.5 - Main screen of the target host's built-in web-server.

Click on the License menu and a screen listing 4 methods to activate the host appears.

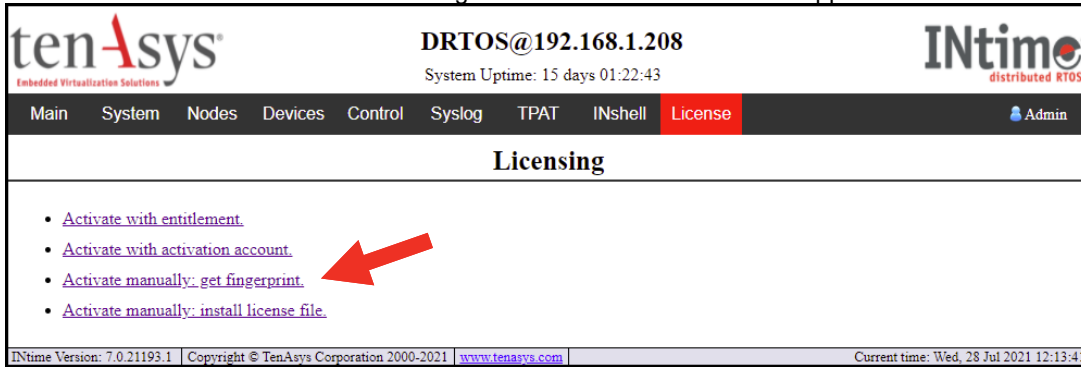


Figure 6.6 - Activation option screen and activation against TenAsys-server entry screen.

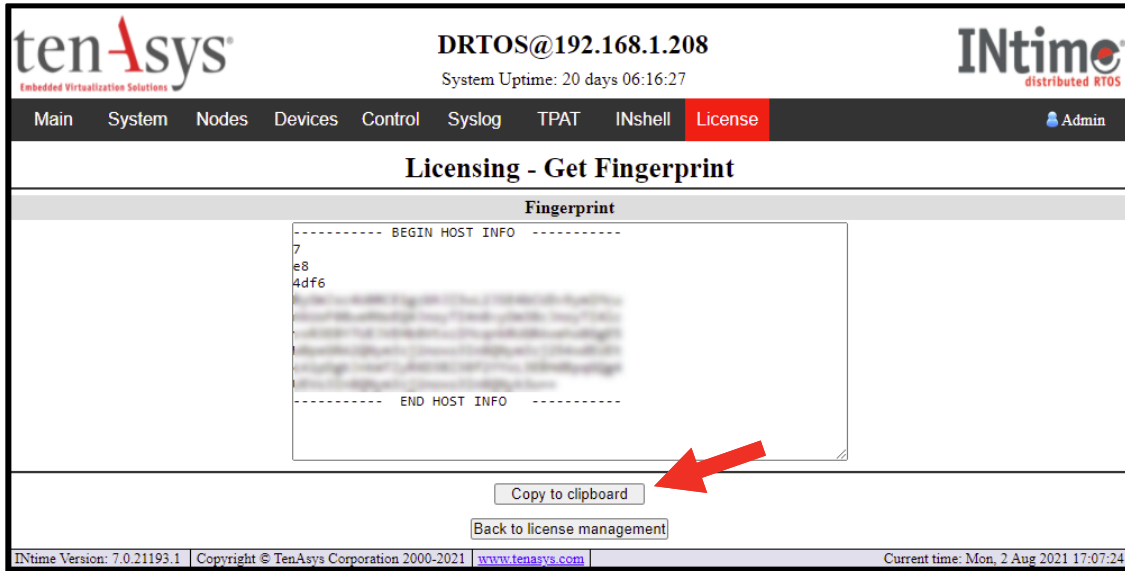


Figure 6.7 - Fingerprint

Use the “Copy to clipboard” button and paste the buffer to save the fingerprint as a text file, then take the file to an internet connected system.

Obtain the license from the TenAsys License Management portal

Open a browser on the internet connected system to http://licman_portal/entitlement, the *TenAsys License Management* portal.

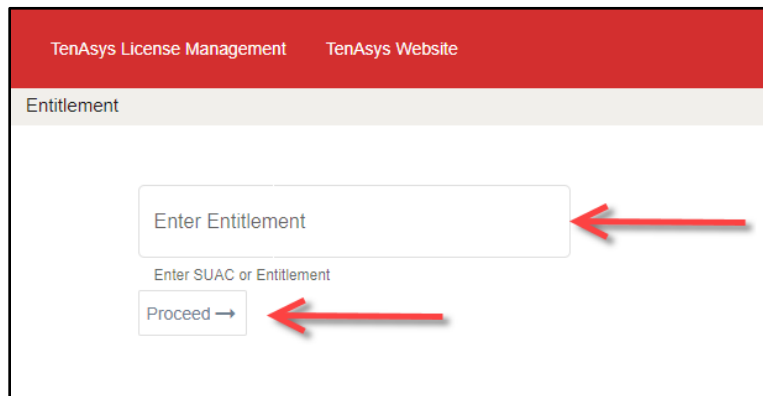


Figure 6.8 – INtime Runtime License Generation portal Entitlement page

Enter the Entitlement.
Click on the “Proceed” button.

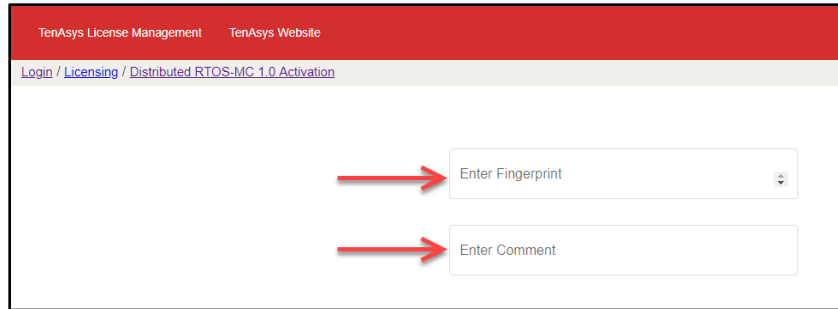


Figure 6.9 – TenAsys License Management portal fingerprint entry

Paste the fingerprint from the target host into the open field.

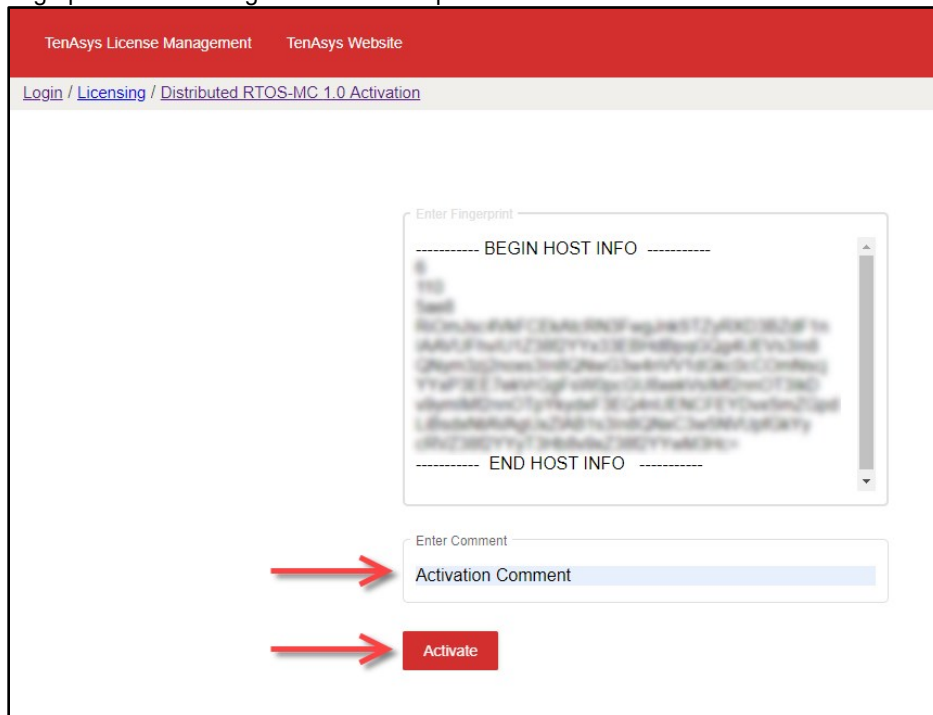


Figure 6.10 – TenAsys License Management portal with fingerprint entered

Click on the “Activate” button to generate a license.

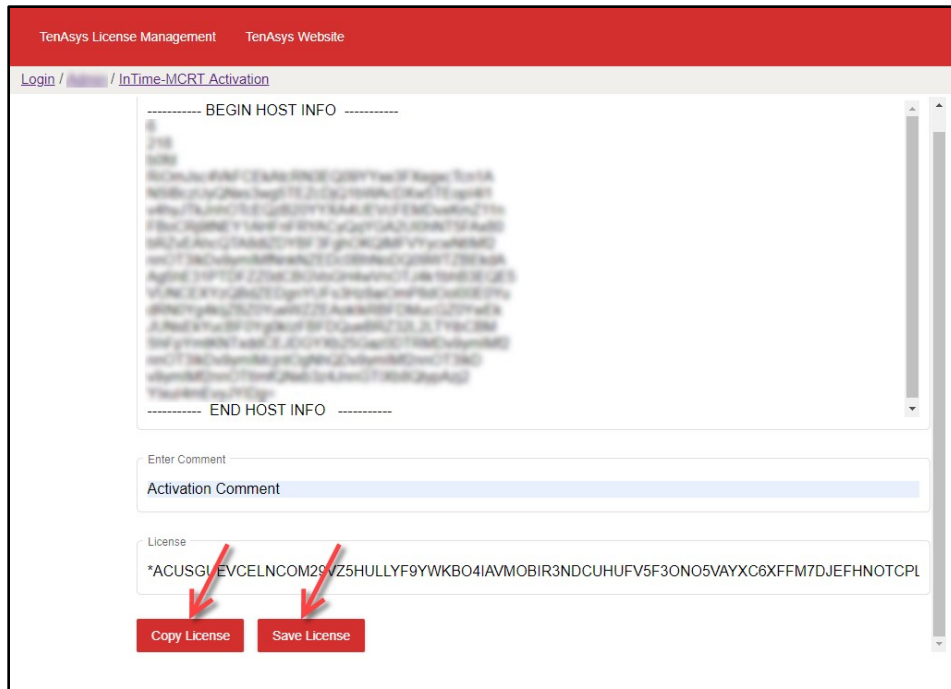


Figure 6.11 – TenAsys License Management portal with generated license string

Use the “Copy License” button to paste the license string to a file or the “Save License” button to save the license string to a file.

DO NOT CLOSE THIS PAGE without saving the license string to a file!!

Transfer the license file to the new target host.

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.

Using Inshell: after transferring the license file to the INtime Distributed RTOS disk, use the command line:

license add <license.lic>

Confirm the installation of the license with the command:

license list

Using the built-in web-server: after transferring the license file to the browser host, open the License page:

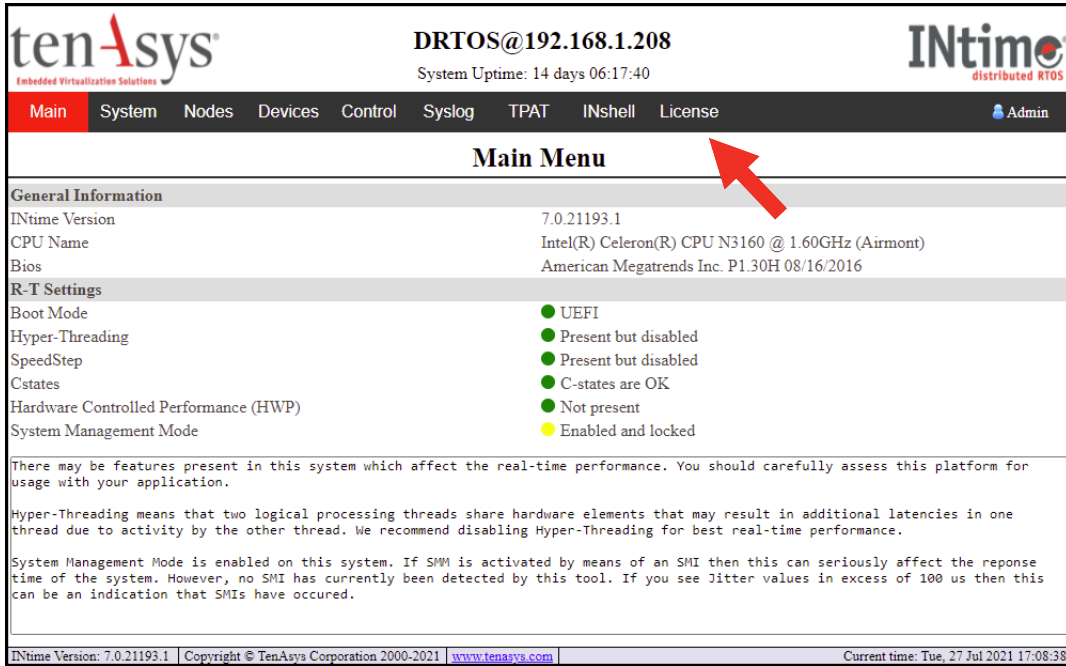


Figure 6.12 – License Management window

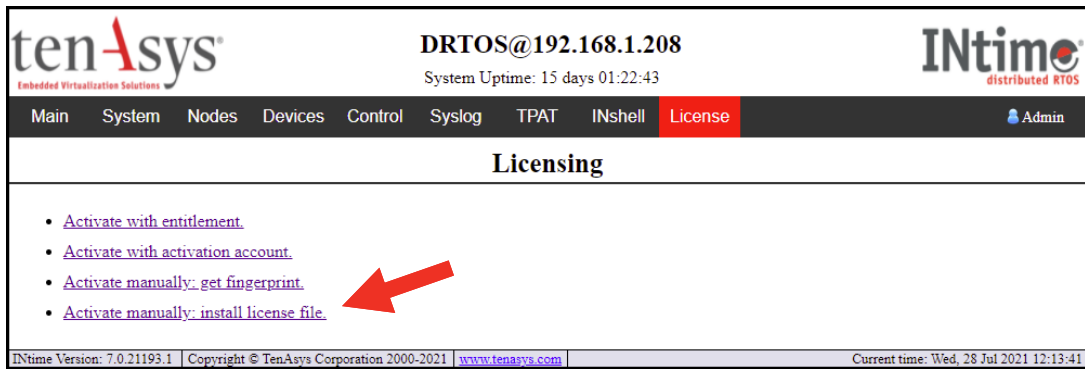


Figure 6.13 – License Management window

Use the “Activate manually: install license file” option to import the license file.

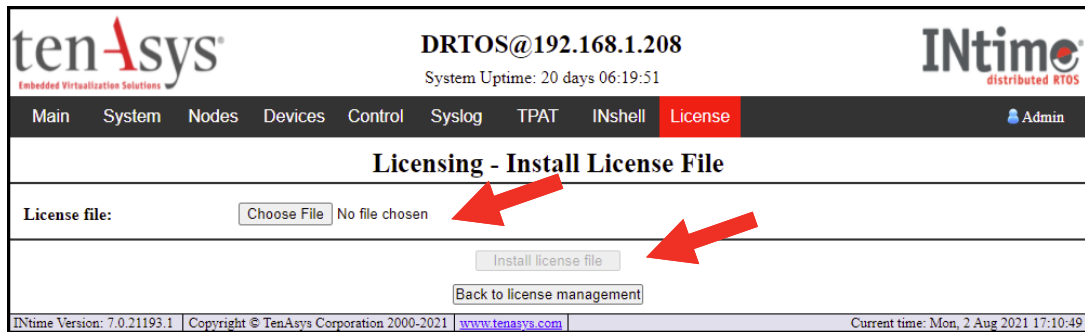


Figure 6.14 – Enter license string window

And select the license file.
Click on the “Install license file” button.

Click on *Back to license management* to verify the new license.

The screenshot displays the INtime web management interface. At the top, the 'tenAsys' logo is on the left, the system IP 'DRTOS@192.168.1.208' and 'System Uptime: 15 days 01:21:13' are in the center, and the 'INtime distributed RTOS' logo is on the right. A navigation menu below the header includes 'Main', 'System', 'Nodes', 'Devices', 'Control', 'Syslog', 'TPAT', 'INshell', 'License' (highlighted in red), and 'Admin'. The main content area is titled 'Licensing' and contains the following text: 'This system has already been activated. INtime RTOS Multi-Core Distribution Node Locked disk SN locked Max local nodes: No Limit'. Below this text are two bullet points with links: '• [Activate manually: get fingerprint](#)' and '• [Activate manually: install license file](#)'. The footer of the page provides version information: 'INtime Version: 7.0.21193.1 | Copyright © TenAsys Corporation 2000-2021 | www.tenasys.com | Current time: Wed, 28 Jul 2021 12:12:11'.

Figure 6.15 – License installed