



INtime[®] Distributed RTOS Licensing
Appendix 1
with a Delegate User Account
using Web Configuration Procedure
INtime 7



Appendix 1 – with Delegate User Account using Web Configuration Procedure

Use this procedure if the INtime target host has an internet connection and an interactive installation is desired. The *User Name* and *Password* for an delegate user account administered by your company's Operations Manager is required. The license will be allocated from the account.

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%\servrc file.

The automated internet activation application removes the manual steps involved in the license activation process by connecting the INtime installation to the TenAsys license server.

The interaction with the server first establishes a connection to validate the delegate user account, then sends the "fingerprint" data, and installs the returned license string.

Step by Step Automated Activation Example

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

Activation of a target host is performed with the aid of 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.

```
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 1.1 - 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.

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 **Configure over network**.

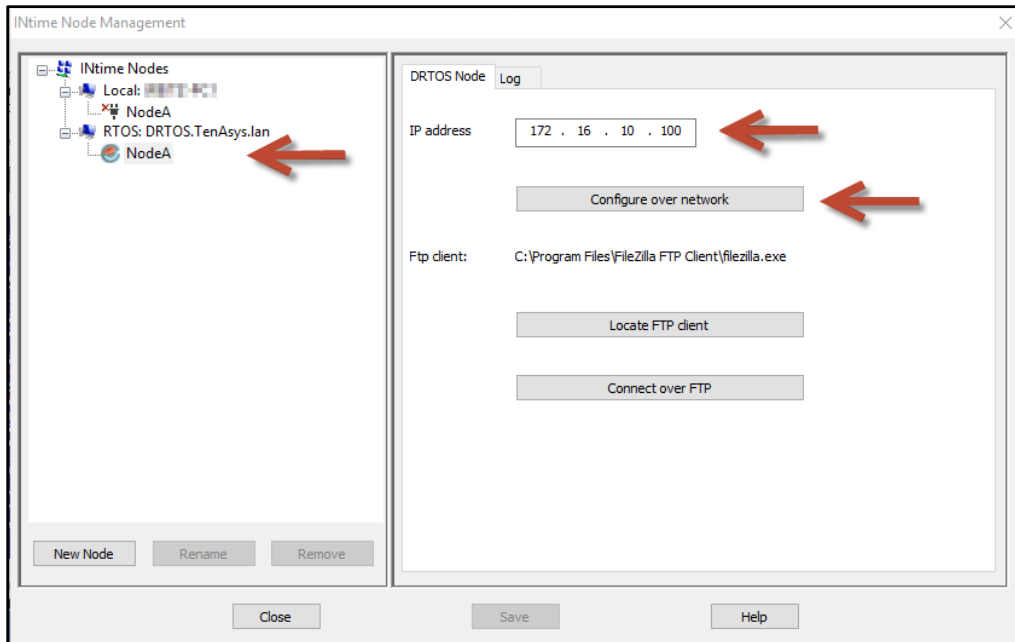


Figure 1.2 – Select the RTOS node with the INtime Node Manager.

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

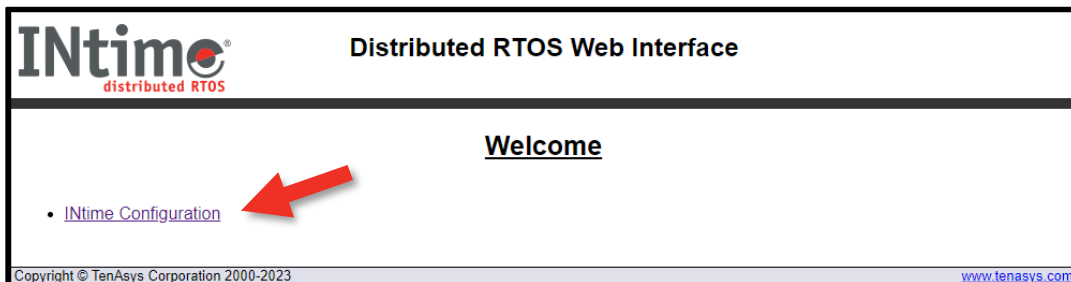


Figure 1.3 – Initial screen from the RTOS web server.

Click **INtime Configuration**.

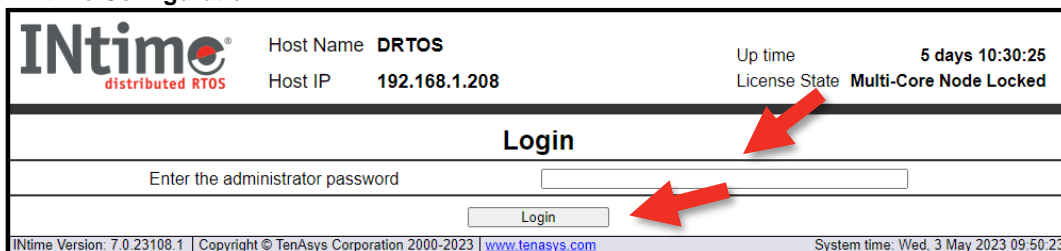


Figure 1.4 - Password screen of the target host's built-in web server.

Enter the admin password set in the installation 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

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.

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.

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.

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Figure 1.5 - Main screen of the target host's built-in web server.

Click the **License** menu and a screen listing 4 license options appears.

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

- [Activate with entitlement.](#)
- [Activate with activation account.](#)
- [Activate manually: get fingerprint.](#)
- [Activate manually: install license file.](#)
- [Activate manually: install license string.](#)

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Figure 1.6 – Activate with activation account option.

Click **Activate with activation account**.

INtime distributed RTOS

Host Name **DRTOS** Up time **5 days 12:37:10**
 Host IP **192.168.1.208** License State **unlicensed**

Info System Nodes Devices Control Syslog TPAT INshell **License** Admin

Licensing - Activate With Credentials

Name Value
 User Name
 Password
 Multi-core? No

Activate

Back to license management

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Figure 1.7 - Activation account option screen.

Enter the delegate user account User Name and Password. Select the type of license required: Multi-core, Yes or No. Click **Activate**. The application will automatically take a “fingerprint” of the host, communicate, and use an available Entitlement from the TenAsys license server and download a license string to the target host. The target host is activated and ready to run permanently.

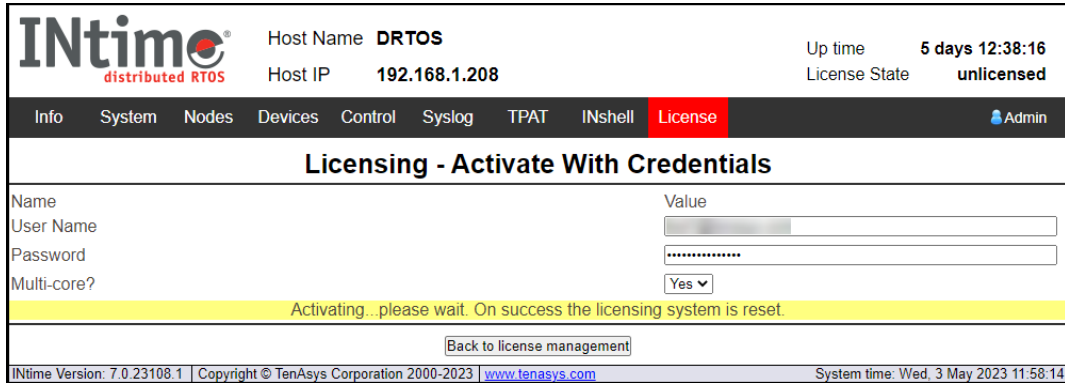


Figure 1.8 – Successful activation.

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

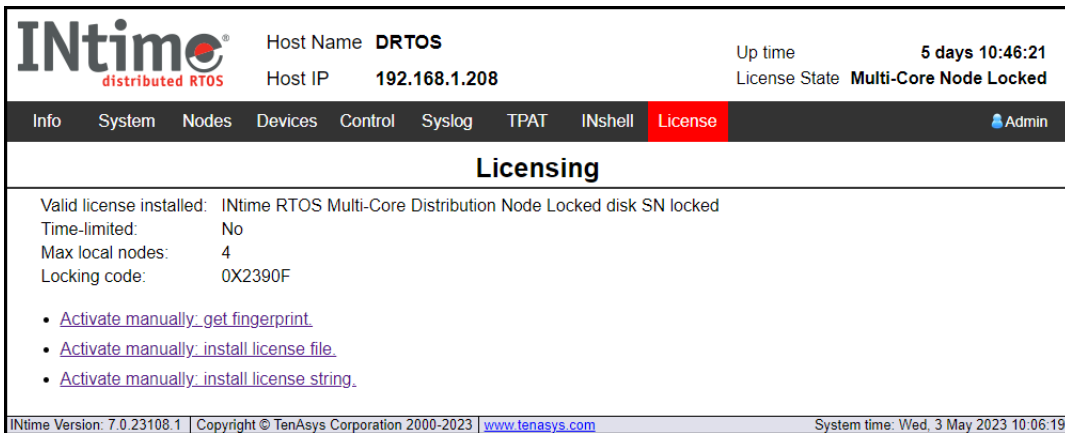


Figure 1.9 – License page after activation.