

INCA V7.4-SP3 – What's New

Changes / Extensions done in this Service Pack



DRIVING EMBEDDED EXCELLENCE

INCA V7.4-SP3 – What's New

Overview

1. **Product information (Use cases, Sample applications, Customer value)**
 - Performance
 - **Functionality**
 - Standards
 - Usability
 - HW support
 - Add-ons
2. **INCA Product Family**
3. **Phase out information**
4. **General Notes**

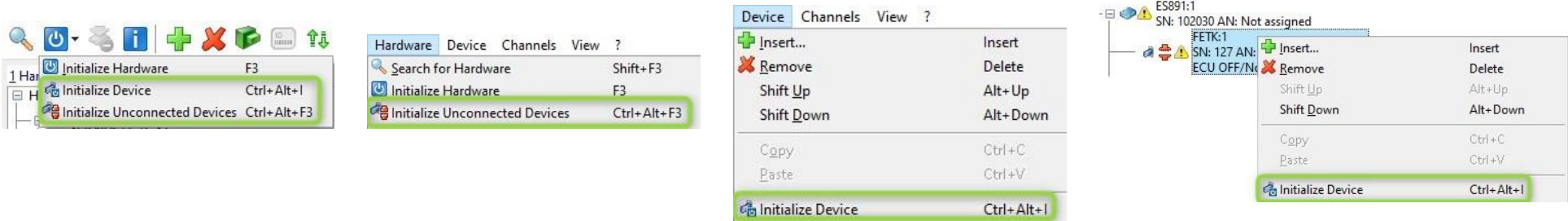
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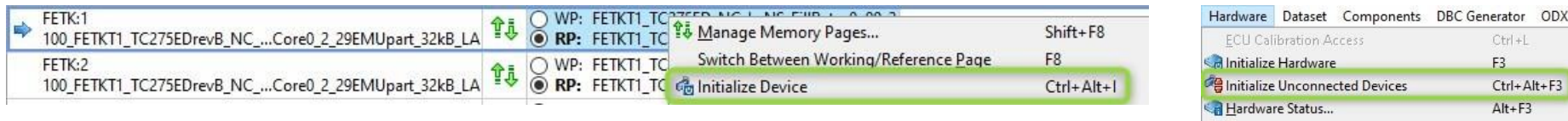
Functionality

Optimized Initialization of Devices connected to INCA

- Allow the initialization of a single device
 - Allow the initialization of only those devices not yet in the *connected* state
- i. New Menus in Hardware Configuration Editor



ii. New Menus in Experiment Environment



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Functionality



LAB File Format V1.3 – Extended Support for Device Information

The device name allows to differentiate between labels of different devices

Allows to filter across multiple devices by using the LAB file for the selection

same
label
name

```
[SETTINGS]
Version;V1.3
MultirasterSeparator;&
```

```
[RAMCELL]
ASAM.M.SCALAR.FLOAT64.IDENTICAL;Engine_1;;;ETK_test_device:2
ASAM.M.SCALAR.SBYTE.IDENTICAL;Engine_1;;;ETK_test_device:2
ASAM.M.SCALAR.SBYTE.IDENTICAL;Engine_1;;;ETK_test_device:1
ASAM.M.SCALAR.SLONG.IDENTICAL;Engine_1;;;ETK_test_device:2
ASAM.M.SCALAR.UBYTE.IDENTICAL;Engine_1;;;ETK_test_device:1
```

different
device

```
[LABEL]
ASAM.C.CURVE.STD_AXIS;;;ETK_test_device:1
ASAM.C.SCALAR.SBYTE.IDENTICAL;;;ETK_test_device:2
ASAM.C.SCALAR.SWORD.IDENTICAL;;;ETK_test_device:1
ASAM.C.SCALAR.SWORD.LINEAR_MUL_2;;;ETK_test_device:1
```

[LAB File Specification](#)

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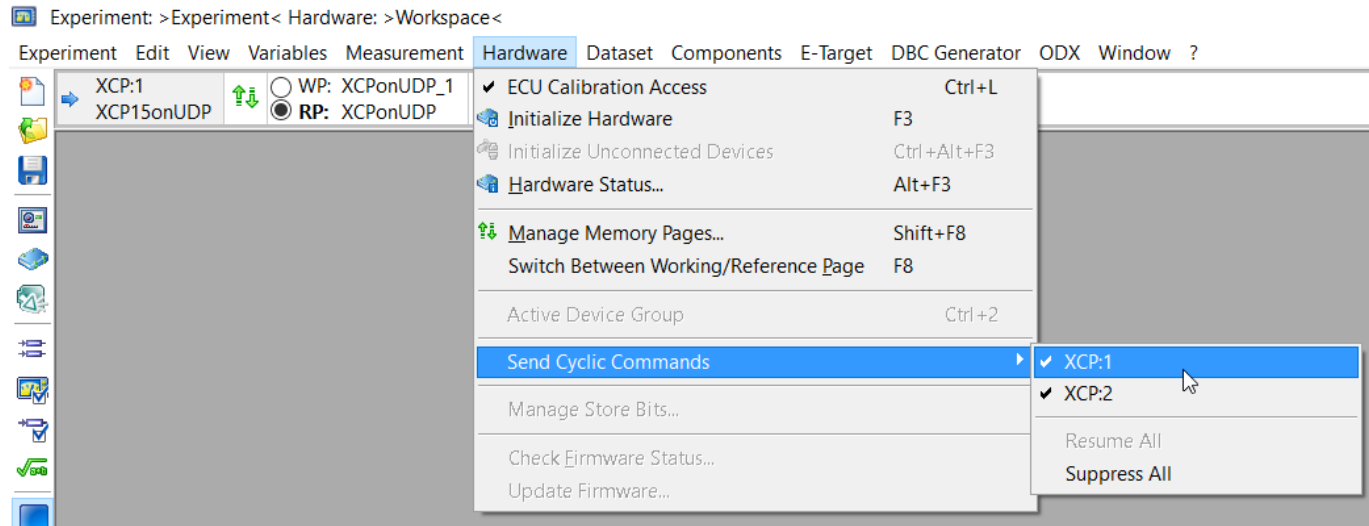
Functionality



EE – Deactivating a (XCP-) Connection without closing INCA or EE

Let the ECU go into sleep mode without being interrupted by cyclic XCP requests

- Menu to disable/enable sending of cyclic XCP commands
- Cyclic XCP commands for connection status and time synchronization are suppressed
- Measurement and calibration can still be used (but XCP commands will interrupt sleep mode)
- COM API support



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Support of new HW devices



ES882.2, ES891.2 and ES892.2 Support

- Integration of new HW devices ES882.2, ES891.2 and ES892.2
- Supporting 8MBaud data transfer rate for CAN-FD

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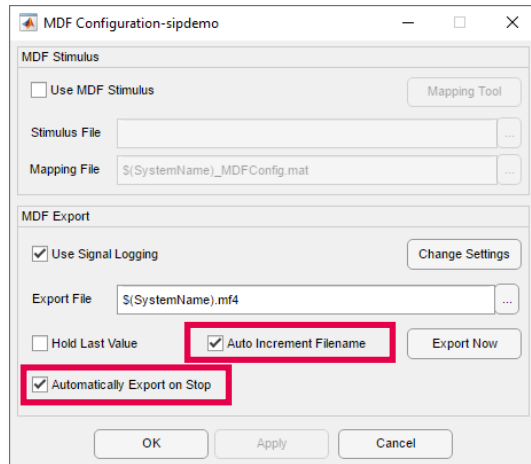
INCA V7.4-SP3 – What's New

Add-ons



INCA-SIP – Advanced GUI for "MDF Write"

- Allows the configuration and setup of automatic MDF Export on 'Stop' Simulation callback
- Supports export file auto-increment to prevent file name collision
- Overwrites previous created export file when auto-increment is disabled
- Appends additional '_xx' when counter resets due to new session or change in file name
- Auto-increment can also be used by the 'Export' button to prevent file name collision



sipdemo_01.mf4	26/10/2022 10:54	MF4 File	4 KB
sipdemo_02.mf4	26/10/2022 10:54	MF4 File	4 KB
sipdemo_03.mf4	26/10/2022 10:56	MF4 File	4 KB

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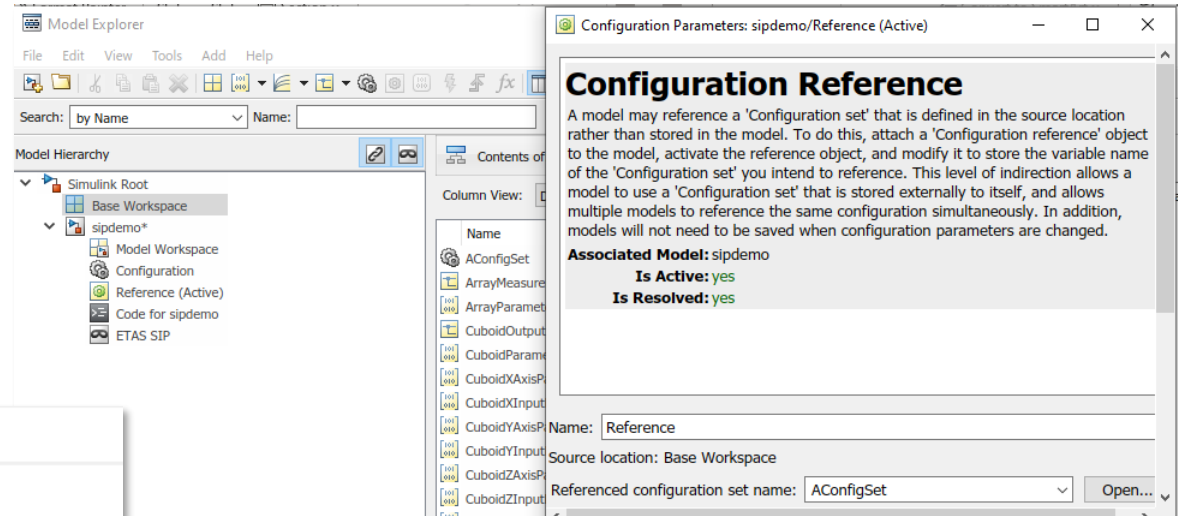
Add-ons



INCA-SIP – Support of Shared Configurations

- Each Simulink® model has a configuration acting as its model specific settings
- Simulink® also supports using external configuration sets, which are not tied to a model. Such shared configurations can be activated for a particular model. Changes in this configuration might affect multiple models
- Now INCA-SIP supports these types of configurations. By a specific new syntax SIP allows to automatically modify settings to use the configurations

```
► ECU port allocation ⓘ 1
03:15 PM Elapsed: 0.36 sec
▼ Shared Configuration ⓘ 1
03:16 PM Elapsed: 0.60 sec
Configuration setting "SignalLogging" was changed from "on" to "off"
```



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Add-ons



MATLAB – Support of MATLAB 2022B

– INCA-SIP & INCA-MIP

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Add-ons



MCE - iLinkRT V3.0 - IPv6

INCA-MCE supports now beside IPv4 additionally IPv6 networks.

Switch to IPv6

Use IPv6 addresses

Establish Connection

How can you establish connection to the Automation System?

RS232 / V.24 connection ("Serial")

Port: COM2 Baud rate: 9600

Network Connection

Network Card: Software Loopback Interface 1

Local Network Address:

Network Adapter / Commands

Use IPv6

Local Network IPv4 Address: 127.0.0.1
(IPv4 Address or zero for system provided IP Address)

Local Network IPv6 Address: fe80::c403:a8ff:fe2e1b%11
(IPv6 Address or zero for system provided IP Address)

ASAP3 Specific

Network Port: 22222 (0-65535)

Use fast socket communication

iLinkRT Get All Server

iLinkRT Version: v3.0

iLinkRT Broadcast Command IPv6 Address: FF02::1
(e. g. multicast ip FF02:1)

iLinkRT Broadcast Command Port: 8090 (0-65535)

iLinkRT Unicast Command Port: 8091 (0-65535)

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INCA Product Family



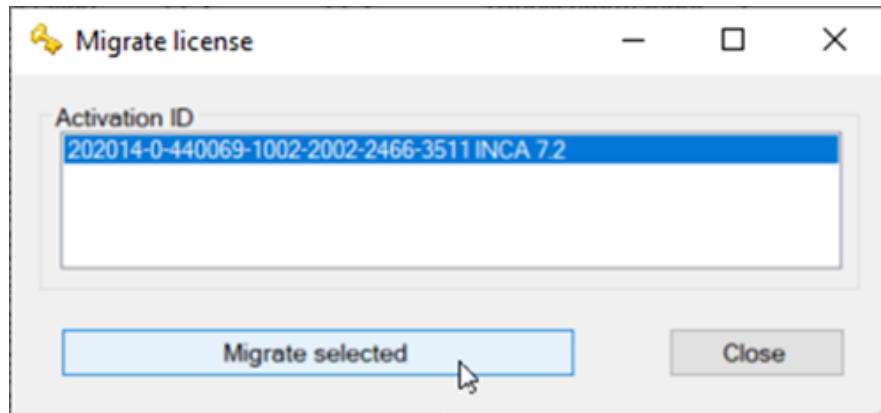
ETAS License Manager - Migration Wizard for New License Technology

ETAS switched from FlexNet Publisher (FNP) to FlexNet Embedded (FNE) license technology.

The first step was done by introducing the new technology for **machine based** licenses:

- INCA 7.3 accepts both FNE licenses and FNP licenses.
- INCA 7.4 will accept FNE licenses only

To assist you with this, ETAS License Manager offers a wizard which migrates your machine based FNP licenses to FNE licenses.



Note:

- ETAS License Manager > 1.8.2 and a valid service contract are required
- New bought machine based INCA licenses are automatically based on FlexNet Embedded.
- User based or Floating licenses are still based on FlexNet Publisher. Further information on introducing FNE for these will follow.

For details please see [Time Line](#) and further info in [ETAS License Management FAQ](#)

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Phase Out Information

Announcement concerning "HW Enable Bits"

- The ETAS enable bits functionality for Supported Vector hardware will be phased out
- QA5 Sales stop since Q1/2022
- QA6 Service stop is planned for Q1/2025

For already supported Vector devices and all newly integrated Vector devices INCA supports now a SW license (Machine-Based, User-Based and Floating)!

All Vector devices with active Enable Bit will be supported by INCA at least till QA6 of the hardware.

- INCA checks for the enable bit first
- If no enable bit is available INCA will check for the SW license

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General Data Protection Regulation



Compliance to General Data Protection Regulation

Please note that personal data is processed when using INCA. As the controller, the purchaser undertakes to ensure the legal conformity of these processing activities in accordance with Art. 4 No. 7 of the General Data Protection Regulation (GDPR). As the manufacturer, ETAS GmbH is not liable for any mishandling of this data.

Data categories

Please note that INCA particularly records the following personal data (categories), and/or data (categories) that can be traced back to a specific individual, for the purposes of assisting with troubleshooting

- Communication data: IP address, date and time
- User data: The user's Windows UserID

Further information to this topic is available in the INCA installation handbook and the INCA online help.

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INCA Training

Seminars offered at ETAS Locations Worldwide or at Customer Site

Deep skills and sound knowledge are essential prerequisites for handling software tools of ever-rising complexity. Our trainers are highly experienced engineers in the field of engineering and support, who relish sharing knowledge on ETAS products and development processes. Target groups for the trainings are beginners, advanced users and those who wish to expand their existing knowledge.

INCA – Calibration (3 days)

- Practical operation of the software and the knowledge of the INCA fundamentals
- Get to know the advantages and disadvantages of various calibration concepts

INCA - Advanced Calibration Techniques (2 days)

- Advanced functionalities in INCA, Tips & Tricks. INCA experience is required
- Workshop part, bring in your own problem statement

INCA - FLOW Coaching

- Using your own calibration tasks to see the benefits of INCA-Flow in your daily work

Some ETAS local offices have their own training programs which are specialized for the local needs. Please contact our local office of your area for the details: <https://www.etas.com/en/trainings.php>

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Virtual Machines

Usage of virtual PC Machines

The usage of INCA on a virtual machine (VM) is restricted and not recommended:

- The VM needs sufficient working memory (RAM), otherwise the performance of INCA goes down
- Access to sufficient graphic card memory (Direct X) is necessary, otherwise the oscilloscope representation of measurement signal is not possible
- Access to hardware interfaces Ethernet, USB, PCMCIA, ... is necessary, otherwise INCA cannot use the connected hardware
- Measure samples may be lost and the accuracy of time stamps is not guaranteed as the higher task priority for hardware access (Target Server) is not given
- ETAS does no special tests concerning VM machines

ETAS recommends to use real PC hardware.

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System Requirements



Minimum System Requirements

- 2 GHz Processor, 2 GB RAM, and DVD-ROM drive *)
- Graphics: at least 1024x768, 256MB RAM, 16bit color and DirectX 9

Recommended System Requirements

- 3 GHz Quad-Core Processor, 16 GB RAM, and DVD-ROM drive *)
- Graphics: at least 1280x1024, 1GB RAM, 32bit color and DirectX 9
- Windows 10 64Bit
- Investigation on performance showed
 - More Memory improves execution time of repetitive operations
 - SSD Hard disks improve the file access times

Supported OS

- Windows 8.1 64Bit
- Windows 10 64Bit (version 1803 or higher)
- Windows 10 64Bit Enterprise (LTSC 2016 or higher)
- Windows 11 64Bit
- Windows Server 2016 64Bit / 2019 64Bit / 2022 64Bit

*) Needed for installation via DVD only
Not necessary when installing via network

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General Notes

Additionally Installed Components	INCA V7.3	INCA V7.4
.Net-Runtime-Environment	V4.8 ¹⁾	V4.8 ¹⁾
VCxRedist (Vcredist_x86 / Vcredist_x64)	VC9+VC10 +VC14	VC9+VC10 +VC14
JAVA SDK Version j2sdk1.4.2_11	X ²⁾	X ²⁾
Perl V5.30.0	X	X
ETAS Certificate	X	X
Direct X	V9 (or higher)	V9 (or higher)
ETASShared	13	14
Windows 8.1 64Bit	X ^{3) 5)}	X ^{3) 5)}
Windows 10 64Bit	X ³⁾	X ³⁾
Windows 11 64Bit	-	X
Windows Server 2016 64Bit / 2019 64Bit	X ⁴⁾	X
Windows Server 2022 64Bit	-	X ⁶⁾
¹⁾ This component is installed only when no or an older version is installed. If a newer version is already installed, it will not be touched. This is checked by a Microsoft installation routine. ²⁾ This component is installed only with ODX LINK ³⁾ For hardware driver support see release notes ⁴⁾ Starts with INCA V7.3 SP4; INCA FLOW, INCA RDE is not released for Windows Server ⁵⁾ .NET V4.8 needed (available from Microsoft Support .NET V4.8) ⁶⁾ Beginning with INCA V7.4 SP2		

Thank you



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