Release Notes

INCA V7.4.7 HF1 – 64Bit

Release: February 2024

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Contents

1 Introduction

Dear customer, in this file you will find the latest information about our product INCA V7.4.

IT IS NECESSARY TO UPDATE ALL FIRMWARE USING HSP V13 PRIOR TO USING INCA V7.4 WITH HARDWARE

(Note: With each INCA Refresh, Service Pack the corresponding HSP V13.x version must be used, available on the ETAS Download Page)

1.1 Definitions and Abbreviations

Term/Abbreviation	Definition
CDM	Calibration Data Manager
EE	INCA Experimental Environment
EHI	ETAS Help Desk International
LiMa	ETAS License Manager
HSP	Hardware Service Pack
HF	Hotfix
HW	Hardware
MDA	INCA Measure and Data Analysis
MIP	Matlab Integration Package
MR	Multi-Recorders
OHI	Open Hardware Integration
OS	Operating System
KIR	**K**nown **I**ssue **R**eport – For severe Problem Reports which occur after a release, ETAS has introduced the Known Issue Report to inform affected customer immediately. The current Known Issues of former versions can be found on the ETAS website: http://www.etas.com/kir
PR	Problem Report
SP	Service Pack
SW	Software
VSD	Variable Selection Dialog
WB	Walkback, INCA system error

1.2 References

1.3 Conventions

The following typographical conventions are used in this document:

Choose **File → · Open**.	Menu commands are shown in boldface.
Click **OK**.	Buttons are shown in boldface.

Press <ENTER>.	Keyboard commands are shown in angled brackets.
The "Open File" dialog box is displayed.	Names of program windows, dialog boxes, fields, etc. are shown in quotation marks.
`Select the file setup.exe`	Text in drop-down lists on the screen, program code, as well as path- and file names are shown in the Courier font.
A *distribution* is always a one-dimensional table of sample points.	General emphasis and new terms are set in italics.

1.4 User Documentation

The INCA user's documentation in PDF format can be found on the DVD or in the installation folder on the PC.

It can be called up from INCA via the menu item **? → Manuals and Tutorial** or via the Windows start – menu: **→ Program → ETAS → INCA 7.4 → Manuals and Tutorial.**

2 Product Definition

2.1 Functions at a glance

New functionality of INCA V7.4 is listed in the overview `INCA-V7.4-Whats-new.PDF`.

You find the overview `INCA-V7.4-Whats-new.PDF` on the installation DVD or ZIP in the folder `\Documentation\WhatsNew` or in the installation folder on the PC.

2.2 General Description

2.2.1 Safety Notice

Calibration activities influence the behavior of the ECU and the systems controlled by the ECU. This may result in unexpected behavior of the vehicle and thus can lead to safety critical situations.
Only well trained personnel should be allowed to perform calibration activities.

Sending CAN messages influences the behavior of the CAN bus network and the systems connected to it. This may result in unexpected behavior of the vehicle and thus can lead to safety critical situations.
Only well trained personnel should be allowed to perform CAN message sending activities.

Calibrate measurement (Write to RAM) activities influence the behavior of the ECU and the systems controlled by the ECU. This may result in unexpected behavior of the vehicle and thus can lead to safety critical situations.
Only well trained personnel should be allowed to perform calibrate measurements activities.

Please read also the `ETAS_Safety_Advice.pdf` in the folder `\Documentation\ReleaseNotes`.

2.2.2 System Prerequisites

The following minimum system prerequisites must be met:

Required Hardware	2 GHz Processor
	2 GB RAM
	DVD-ROM drive (for installation)
	Network adapter
	Graphics with a resolution of at least 1024 x 768, 256 MB RAM, 16bit color and DirectX 9
Required Operating System	Windows® 8.1 64 bit*)
	Windows® 10 64 bit (version 1803 or higher) *)
	Windows® 10 64 bit Enterprise (LTSC 2016 or higher) *)
	Windows® 11 64 bit *)
	Windows® Server 2016 and 2019 64 bit *)
	(English, French, Japanese, Chinese and German OS version supported)
	*) INCA V7.3 and higher supports the 64-bit operating system only. 32-bit operating system is not supported.
	Note:
	The support of Windows® Vista was discontinued with INCA V7.2 SP5, the support of Windows® 7 was discontinued with INCA V7.2 SP16, and the support of Windows® 8 was discontinued with INCA V7.3 SP0. (Details: see INCA-V7.4-Whats-new.pdf)
Required Free Disk Space	5 GB (not including the size for user data; minimum required, but not recommended)

The following system prerequisites are recommended:

Recommended Hardware	3 GHz Quad-Core Processor or equivalent
	16 GB RAM
	DVD-ROM drive (for installation)
	Network adapter
	Graphics with a resolution of at least 1280 x 1024, 1GB RAM, 32bit color and DirectX 9
Recommended Operating System	Windows® 10 64 bit
	(English, French, Japanese, Chinese and German OS version supported)
Recommended Free Disk Space	>10 GB
Recommendation on Performance	Investigation on performance showed:

- More Memory improves execution time of repetitive operations
- SSD hard disks improve the file access times

Template: 00TE00156 V07 – released

2.2.3   Software Prerequisites

Important notes:

- In order to use INCA the user needs read and write access to the registry path HKEY_LOCAL_MACHINE\Software\ETAS (for more details about privileges, please refer to the `INCA_V7.4_Install_Guide_xx.pdf` chapter "Privileges").

- Hyperthreading is supported

- Multiple monitors may be used, but there is no special functionality in INCA for them.

2.2.4   Restrictions

WINDOWS® XP, WINDOWS® 95, WINDOWS® NT, WINDOWS® 98SE, WINDOWS® 2000; Windows® Vista and Windows® 7 are not supported.

INCA does not officially support PCMCIA adapters used in a Desktop PC for connecting ETAS hardware. If communication problems occur with such an installation, ETAS cannot offer a solution. Please check at first whether the installation of the PC adapter and its driver software has been performed successfully.

INCA offers a mdf3 - 4Byte converter that is called MDF4 converter.

This converter converts MDF3 files to a special MDF format using 4 byte variables. This will not convert files to the new ASAM MDFV4.0 format. We have deliberately kept the old MDF4 name in INCA to ensure the COM-API is still compatible with earlier INCA versions.

When using triggers to start or stop a recording, the recording duration has to be at least 3 seconds. In case of a shorter recording duration INCA might not be able to record all events. A period of at least one second is required after a pause event, before the start trigger condition may trigger again. Otherwise INCA does not recognize the pause and does not include an appropriate pause comment into the recorded data file. This may lead to unexpected display results in the MDA.

Since V6.2.0 INCA allows parsing A2L files containing 2-byte characters.

However the following restrictions apply:

- 2-byte strings are not always displayed correctly

- copy and compare of 2-byte strings is only possible if source and destination have the same encoding

MDA/INCA - Calculated Signals:

- It is recommended to use '.' as decimal symbol for defining calculated signals

- Using library functions in formulas might causes some differences in the number of samples

- Measure time as input signal does not work correctly (INCA issue only)

- Dependency view is not able to show more the 5 levels of a cascade

- Using different rasters as bases for calculated signals might cause wrong results

CDF V2.0

- Rescale axis of Vector CDF files are rejected by INCA 6.2 (and subsequent)
The reason is that Vector writes rescale axis in CDF V2.0 in a different way than INCA.

Write to RAM

- When using CSE for Write to RAM, values in scenarios can be edited only in PHYS representation.

ETAS INCA V7.4 introduces a new version of the target server component.

For this reason, with INCA V7.4 and former versions of the ETAS Experiment Environment (not release for operation with INCA 7.4) simultaneous online operation will not be possible. E.g., if during bypass operation, INCA V7.4 is used to measure and to calibrate on an ECU, the Experiment Environment not released for operation with INCA 7.4, cannot access the corresponding prototyping hardware (e.g. ES910) at the same time.

Recommendation:

- Use former INCA versions for such use cases.
- Use such versions of the Experiment Environment, LABCAR-OPERATOR and INTECRIO which are released for operation with INCA V7.4.

2.2.5 Miscellaneous

Problems may arise with new scan engines of virus scan tools. To ensure the highest data security for data in the INCA database, the database is directly saved after every data change or access. This leads to a high number of read/write cycles and this might initiate the scan engine of the virus scan tools to check the differences if the option 'scan all files' is set. This leads to a delay working with INCA. We recommend excluding all files of the INCA database from scanning.

Whenever uninstalling INCA, the included INCA uninstall program should be used. This ensures that all add-ons and other products installed with INCA are also uninstalled (except ETASData and ETAS License Manager). Never delete files or folders manually.

INCA differentiates between online (=visualization) and offline (=recording) data. However, online data may not be complete in high "system load situations". Offline data is being buffered internally and ensured to have no gaps in the recorded data file.

The INCA-MIP add-on (MATLAB Integration Package) uses by default the online data because data is always available for all devices at all times. For switching to offline data, an API command is available.

For Rapid prototyping purposes, the ES4xx module chain can be connected directly to the ES910. For measurement with INCA the ES4xx module chain shall be connected directly to the measurement setup (i.e. ES600)

The documentation provided in the PDF format can be viewed and printed using the Adobe Acrobat Reader, which is available free of charge at http://www.adobe.com

The latest version of the INCA manuals in PDF format is part of each INCA Service Pack and installed onto the computer.

2.3   Delivery

The INCA software is delivered with an automatic installation routine on a DVD (or ZIP – file) including the INCA software, documentation, tools, utilities, and further information. All software documentation is available in the Portable Document Format (PDF), which requires Adobe® Reader®.

If the installation routine does not start automatically execute the `autostart.exe` program on the DVD manually. Select your preferred language, then **Installation** and finally select **INCA V7.4 installation** first. The Hardware Service Pack (**HSP V14.x Installation**) has also to be installed for proper operation.

2.3.1   Used 3rd Party Software

The 3rd Party Software used by INCA, its add-ons and components is listed in the documentation in the folder `\Documentation\OpenSourceSoftware`.

The Open Source Software Attribution documentation (PDF) of INCA covers INCA but also almost all of the INCA add-ons and components shipped with the INCA Service Pack.

For all other products and components check the separate Open Source Software Attribution documentation within this folder.

The documentation of hardware related Open Source Software Attributions are shipped with HSP (Hardware Service Pack) and can be found within the corresponding folder there.

2.4   Installation

For details on installation select (after the automatic installation started from DVD) **Documentation → Manuals → INCA_V7.4_InstallGuide_xx.PDF**, Chapter "Installing the Software" or in the folder `\Documentation\Manuals` on the DVD or ZIP-file.

2.4.1   Important Installation Hints

- **Very important:** After the installation a reboot of the computer system is required.
- MDA V8 is shipped with the INCA 7.4 DVD and installed automatically with the INCA 7.4 Service Pack installer (might be unselected during installation).
- User shall not install/uninstall licenses while licensed software is online. Recommendation: Shut down product and manage licenses then.

2.4.2   Related Components

Firmware

IT IS NECESSARY TO UPDATE ALL FIRMWARE USING HSP V13 PRIOR TO USING INCA V7.4 WITH HARDWARE.

The Hardware Service Pack (HSP) V13 is also included on the installation DVD. Updated versions are available on the ETAS Download page.

ETK Tools

Configuration support of ETK/XETK modules is provided by a separate add-on 'ETK Tools'.

This installation medium contains the latest version of the 'ETK Tools' add-on available on the date this INCA version is released. The add-on might be installed automatically during the installation of INCA Service Pack (has to be selected). For new versions of the 'ETK Tools' add-on please check our website. It is also part of the INCA Service Pack.

2.5   Supported Hardware with INCA V7.4

Beginning with INCA V7.3, INCA supports more hardware by default with the INCA base installation. The corresponding INCA Add-ons are no longer required.

2.5.1   ES4xx (Daisy-Chain) and ES6xx Support

INCA V7.4 supports the following Daisy Chain modules. No further Add-on installation is required:

The following (Daisy-Chain) devices are supported:

- Voltage measurement instruments: ES410, ES411, ES413 and ES415
- Thermo measurement instruments: ES420 and ES421
- Lambda measurement instruments: ES430, ES432, ES630, ES631, ES635 and ES636
- Pulse signal measurement instruments: ES441
- Multi-IO Module: ES930

The following ES6xx devices are supported:

- Voltage measurement instruments: ES610 and ES611
- Thermo measurement instruments: ES620
- Voltage and Thermo measurement instruments: ES650

2.5.2   ES5xx, ES8xx and ES9xx Support

INCA V7.4 supports the following modules. No further Add-on installation is required:

	CAN	CAN FD	CAN XL	LIN	FLX	ETH[1]	ETK	FETK
ES132	X	X						
ES160						[2]		
ES162						[2]		
ES165						[2]		
ES511.1	X			X				
ES512.1	X				X			
ES523.1	X	X						
ES581.4	X							
ES582.1	X	X						
ES583.1					X			
ES584.1	X	X		X				
ES592.1	X			X			X	
ES593.1-D	X						X	
ES595.1	X			X	X		X	
ES882	X	X		X		[2]		
ES882.2	X	X	X	X		[2]		
ES886	X	X		X		X		
ES886.2	X	X	X	X		X		
ES891	X	X		X	X			X
ES891.2	X	X	X	X	X			X
ES892	X	X		X				X
ES892.2	X	X	X	X				X
ES910.3-A	X			X			X	
ES910.2	X			X			X	
ES910.2-B	X			X			X	
AS951.1-A	X			X			X	
ES920.1					X			
ES921.1	X							
ES922.1	X	X						

(1)   Automotive Ethernet

(2)   Automotive Ethernet media converter

ES92x piggy support in ES91x modules.

	ES920.1	ES921.1	ES922.1
ES910.3-A	X	X	X
ES910.2	X	X	
ES910.2-B	X	X	

AS951.1-A		X	

2.5.3 3rd Party Support

INCA V7.4 supports a number of 3rd party bus interface devices. The necessary AddOn is part of the INCA Service Pack. The operation of these devices with ETAS software must be enabled. The licenses can be purchased from ETAS. Please contact your ETAS sales representative.

The following 3rd Party hardware is supported in INCA:

	CAN	CAN FD	LIN	FLX	ETH
vCAN	X	X			
VX1132	X	X			
VX1135	X	X		X	
VX1161.41A	X	X			
VX1161.41B	X	X		X	
CANcard XLe	X		X		
CANcase XL	X		X		
CANCase XL log	X		X		
VN1610	X	X			
VN1611	X	X	X		
VN1630(A)	X	X	X		
VN1640(A)	X	X	X		
VN1670	X	X	X		
VN5240					X
VN5430					X
VN5610(A)	X	X			X
VN5611					X
VN5612					X
VN5620	X	X			X
VN5640(A)	X	X			X
VN5650	X	X			X
VN7600	X			X	
VN7610	X	X		X	
VN7640	X	X	X	X	
VN8910(A)					
VN8911					
VN8914					
VN8950[2]	X		X		
VN8970[2]	X	X	X	X	
VN8972[2]	X	X	X	X	

(1)   Automotive Ethernet

(2)   piggies for VN89xx(A)

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2.5.4   Addons and CAN FD Support

LIN Monitoring, FlexRay Monitoring and XCP on FlexRay (MC) are only supported with the corresponding Add-Ons.

Uses cases supported on CAN FD bus:

- CAN FD Monitoring

- UDS on CAN FD (ISO14229 on ISO15765-2 from 2013-10-22)

- UDS on CAN FD flashing with INCA-ProF

- XCP on CAN FD

- XCP Flash on CAN FD

- CAN FD Frames sending with ProF

- Support of Vector VN7610 with USB to FlexRay, CAN and CAN FD interfaces. CAN/CAN FD and FlexRay are supported in parallel using a FLX/CANcable (2Y cable).

2.6   Licensing

INCA, MDA and some INCA add-ons are protected via electronic licensing.

MDA and the INCA Add-ons could be installed automatically with help of the INCA Service Pack Installer by selecting the corresponding products during installation.

In order to run and use the products, a license file is required that needs to be installed via the ETAS License Manager. The license manager is opened during the installation and can also be started at a later point as an external program located in the ETAS program folder in the Start menu.

The license file can be obtained through a self-service portal on the ETAS website by using the software entitlement you received during the order process or it is provided by your tool coordinator.

3   Changes

This chapter describes changes with respect to the previous version of INCA.

3.1   What's New

See What's New slides of INCA: Select **Version Info → What's new presentation** on the automatic installation from DVD or the `INCA-V7.4-Whats-new.pdf` in the root folder of the DVD or ZIP-file.

3.2   Compatibility to Earlier Releases

Compatibility to other INCA versions has been taken into account. An INCA V7.2 data base will be converted automatically to an INCA V7.4/V7.3 64-bit data base.

Due to change to a 64-bit data base, INCA V7.2 cannot use the data base of INCA V7.3 or V7.4 directly. Exchange is possible via the export and import option of INCA V7.4/V7.3 and INCA V7.2.

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3.3   Known Issue Reports

If a product issue develops, ETAS will prepare a Known Issue Report (KIR) and post it on the internet. The report includes information regarding the technical impact and status of the solution. Therefore you must check the KIR applicable to this ETAS product version and follow the relevant instructions prior to operation of the product.

The Known Issue Report (KIR) can be found here:

http://www.etas.com/kir

3.4   Known Issues

This section describes the general set of known problems of the released version of INCA V7.4, valid for all INCA 7.4.x releases.
For version specific new and solved known issues see the corresponding section in the version history below, please.

3.4.1   Software related Items

Problem Number	Title
EHI #637804	The ProF script is aborted due to an incorrect parameter call of a DLL file. A warning is displayed during the ProF Flow Control: **"A 32 bit DLL is called by a 64 bit process."** The problem occurs if a 32 bit customer DLL is part of the ProF configuration and the 32 bit customer DLL is included in the [ChangePath] section of the INSTALL.INI file in the ProF configuration. The root cause of the problem is the entry in the [ChangePath] section in the INSTALL.INI file. During the ProF configuration installation, the 64 bit INCA V7.3 performs a change path instruction on the 32 bit customer DLL and stores the DLL as modified in a 64 bit utility into the target folder of the ProF configuration. The 32 bit DLL changed by the 64 bit utility in INCA V7.3 is corrupted and not operational in both, INCA V7.3 and V7.2 versions. This is an inconsistence in the ProF configuration when intended to be used in a 64 bit INCA version and has to be adapted on customer side. **Workaround without changes in the ProF configuration:** Remove the ProF configuration installed with the 64 bit INCA version and reinstall it with a 32 bit INCA (V7.2.17 or lower). Subsequently the ProF configuration works as expected in both INCA 32/64 bit versions. **Workaround with changes in the ProF configuration:** The 32 bit customer DLL entry in the [ChangePath] section in the INSTALL.INI file has to be removed. Subsequently the adapted ProF configuration installed in INCA V7.3 works in both, INCA 32-/64 bit versions.
EHI #74310	Electronic Licensing - Valid local license not found when LAN connection deactivated

	If the LAN connection may be automatically deactivated when the Ethernet cable is not plugged anymore.
	When using electronically licensed software products depending on the MAC-address, the application does not find a valid license and cannot be started because the MAC address cannot be identified. Ethernet adapter has to be active.
EHI #2008404287	Excessive RAM usage with combined editor - accumulation over long period of time (with many cycles)
	For test bench applications the combined editor must be used in the "table only" mode.
EHI #514755	Computer might freeze during recording in case of outdated network card driver. In case update to the latest version, please.
EHI NA	Installation: When one of the required packages of redistributables or .NET are not installed before the INCA Service Pack, a reboot might be necessary. It is not recommended to suppress the reboot in such case – as following installation might be not complete or get corrupted.
EHI NA	INCA V7.3/V7.4 64 bit COM-API - Clients which are compiled for .NET x86 (32bit) are not supported - It is necessary that .NET clients are compiled for x64.
EHI NA	INCA Add-Ons (or INCA engineering Add-Ons) which are not part of the INCA Service Pack has to be updated manually.
EHI #449628	CDM: Calibration of values might be very slow (15 Sec for one inc/dec step) in case of instant compare together with a large number of (sub)groups+(sub)functions and working in function mode and all functions are used.
	Workaround: Disable instant compare. No change planned.
EHI #NA	Usage of virtual PC machines.
	The usage of INCA on a virtual machine (VM) is restricted and not recommended. ETAS recommends to use real PC hardware:
	O The VM needs sufficient working memory (RAM), otherwise the performance of INCA goes down
	O Access to sufficient graphic card memory (Direct X) is necessary, otherwise the oscilloscope representation of measurement signal is not possible
	O Access to hardware interfaces Ethernet, USB, PCMCIA, ... is necessary, otherwise INCA cannot use the connected hardware
	O 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
	O ETAS does no special tests concerning VM machines
	No change planned.
EHI #550011	Devices ETK-S20/ETK-S21/ETK-S22: Incorrect ECU status is shown in the INCA EE during ECU power loss
	The ETK devices ETK-S20/ETK-S21/ETK-S22 in case of MCU power off and ETK still supplied with power are actively driving the MCU reset,

which could lead to the status information inside the INCA EE of "ECU in reset" instead of "ECU off". The behavior was not changed to the new INCA version. The behavior to other serial ETK devices could differ in this use case though because of a different ETK reset handling.

EHI #564713   Setting of CAN FD Transceiver delay compensation (ON/OFF) shall be consider in the J2534/MDI2 device implementation. Configuration of this parameter in INCA-HWC will be ignored.

CAN FD Transceiver delay compensation configured in INCA HWC will be ignored, since the J2534 standard interfaces does not provide an interface to allow configuration of this parameter on device.

EHI #563090   Sporadically happens that the datalogger could not be activated and then stop simulation is not working.

Then an update of the Windows Universal CRT might be required. The Windows Universal CRT Dll is a component of the Windows Operating system and updated with Windows OS. Details see:

https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows

EHI #645006   Multi-Dimensional Measurements - ASAP2 LAYOUT: INCA interprets MATRIX_DIM measurement arrays as COLUMN_DIR if LAYOUT keyword is not defined. This might lead to wrong interpretation and wrong measure data.

The ASAP2 V1.6 (2009) specification introduced the optional LAYOUT to offer the possibility to describe the different behavior. As default, when LAYOUT is missing, the ASAP2 spec V1.6 introduced as default ROW_DIR.
INCA supported 2-dimensional measurement arrays already long before ASAP2 introduced LAYOUT. INCA uses as default COLUMN_DIR.
As result, INCA indexes the measurement arrays column wise instead of row wise.
INCA will change its default for measurement arrays without LAYOUT from COLUMN_DIR to ROW_DIR beginning with INCA V7.3.3.
Solution with INCA V7.3.3 and higher:
As there are already A2L files in the field that describe 2-dimensional measurement arrays without LAYOUT with ASAP2 VERSION up to 1.6 INCA will change the default dependent on the ASAP2 VERSION stated in the A2L file.
For A2L files with ASAP2 VERSION < 1.7 INCA will keep COLUMN_DIR as default!
For A2L files with ASAP2 VERSION >= 1.7 INCA will use ROW_DIR as default!
If the ASAP2 measurement description contains the LAYOUT info INCA respects the given memory orientation.
If LAYOUT is missing INCA interprets multi-dimensional measurement arrays by default dependent on INCA version and ASAP2 version:

INCA \ ASAP2	V1.5	V1.6.1	V1.7
V7.2.x	COLUMN_DIR	COLUMN_DIR	COLUMN_DIR

V7.3.2	COLUMN_DIR	COLUMN_DIR	COLUMN_DIR
V7.3.3 ff.	COLUMN_DIR	COLUMN_DIR	ROW_DIR

Recommendation:
The creators of A2L files shall use always the optional ASAP2 keyword LAYOUT to describe the orientation exactly.

EHI #NA

J2534 support with INCA V7.3 and V7.4.

Usage of 3rd party hardware via J2534 (PassThru):

INCA 7.3 as 64 bit application uses 64 bit drivers provided by other vendors to access their hardware.

It was found that existing drivers from other vendors are using a byte alignment that does not match the J2534 specification (J2534_1_2004 spec (section 9.2.2 Attaching to the Dll From an Application).

In 32 bit applications this did not play a role but needs to be considered in 64 bit applications.

ETAS implemented its J2534 functionality from INCA using this non-standard-conform byte alignment by default to support existing drivers from other vendors.

In case you find your 3rd party hardware device using J2534 not working together with INCA, please ask the ETAS MCD support for assistance or the standard-conforming version.

Tested devices are Kvaser, PEAK, (Vector, but further issues found)

With INCA V7.3.2 and higher it is now possible to switch to the standard-conform variant (in case, ask also here your ETAS MCD support for assistance).

EHI #662199

ES850: Negative timestamps of the first measurements at the begin is possible
INCA requests the Time Stamp for the measurements on ES850 before the measurement is started. As soon the measurement starts, INCA does a time correlation, which should present a negative time stamp for the first recording measurements.

NA

Known issue with *64Bit Integer Support*
   IF
calibration is done in the INCA experiment or CDM
   AND
a parameter of type 64Bit Integer is used
   AND
the parameter holds a value that needs more than 52 bits for representation
   AND
the user changes the values
   AND
uses afterwards 'undo'
   THEN
INCA does the 'undo' with the physical representation of the former

value. The result is a 'casted' value that has less precision as the original former value.

NA	XETK & ETK Tools: TC27xED_A microcontroller no longer supported with XETK.
	Micro Controller Support: Removed support of TC27xED_A of XETK in HSP V13.0.0, INCA V7.4.0 and ETK Tools V4.3.0.
	In order to support the TC27xED_A, install and use INCA V7.3.7 and ETK Tool V4.2.7.

3.4.2 Hardware related Items

Problem Number	Title
EHI #731074 and related	#731074 Vector VN1670 - device cannot be initialized
	#724382 Error when measuring with INCA LIN using VN1670 Host
	If a VN1670 is in use and the device can be found, but it is not working properly (channels cannot be initialized or timestamps are wrong), it is recommended to perform a factory reset on the device.
	Note: Due to missing APIs, there is currently no way for INCA to detect a critical configuration of the device.

4   Hints

4.1   Compatibility with other INCA versions

- INCA V7.4 introduces new functionality
- When designing and implementing this functionality,
  compatibility to other INCA versions has been taken into account
- Exchange of export files or databases with other INCA versions is possible
  - Easy, safe, and fast migration to INCA V7.4
  - Projects created in former INCA V7.2 and V7.3 can be reused
  - Up and downward compatibility allows using INCA in distributed development projects
  - An INCA V7.2 data base will be converted automatically to an INCA V7.4 64-bit data base.

- o Due to change to a 64-bit data base, INCA V7.2 and former versions cannot use the INCA V7.4 data base directly. Exchange is possible via the export and import option of INCA V7.4 and INCA V7.2.

- o For better performance, it is recommended to exchange 64-bit export files (*.EXP64) with INCA V7.4 which are created with INCA V7.4, but not 32 bit export files (*.EXP). Accordingly, frequently used 32-bit export files (*.EXP) should first be converted into 64-bit export files (*.EXP64) with INCA V7.4. Conversion between the 32-bit data base format and the 64-bit date base format is an additional step that needs extra time (approximately the same time as a normal import). This will approximately double the time to import/export the 32bit EXP file. In contrast, the import and export of 64-bit export files has the same performance as INCA V7.2 and former versions. Note: 64-bit export files (*.EXP64) created with INCA V7.4 and used with INCA V7.4 has the best performance.

5 Version History, Refresh and Hotfix Information

The INCA 7.4 Service Packs (SP) updates (or downgrades) a former INCA 7.4 installation automatically, in case INCA V7.4 is already installed. The INCA V7.4 base installation and INCA Add-On installations will be updated with help of the INCA Service Pack.

If INCA V7.4 is not installed, it is highly recommended to install immediately the latest INCA V7.4 SP (there is no installation of INCA V7.4 SP0 or another former INCA version required).

Important: The automatic update requires a corresponding INCA V7.4 installation (but it is also possible to install an INCA V7.4 SP without a previous installation of INCA V7.4, see above)

An INCA 7.3 installation has to be updated manually to INCA 7.4 (like a new installation).

All refresh software updates (shipped with INCA 7.4 Service Packs) are cumulative. The most recent refresh incorporates any changes introduced by previous refreshes.

The following issues have been fixed with INCA V7.4. History is listed in reverse order.

5.1 INCA V7.4.7 HF1

5.1.1 Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.1.2 New Features and enhancements

- See INCA V7.4.7

5.1.3 Known issues of INCA V7.4.7 HF1 – Important Hints

- See INCA V7.4.7

5.1.4 Known issues solved with INCA V7.4.7 HF1 – Important Hints

- See INCA V7.4.7

5.1.5 Bug Fixes and Improvements

EHI #	Title
748517	No data in customer instruments that use dynamic variable references. Also affects the INCA add-ons Touch and RDE.
751898	[WBID3421345940] EtasGroupArrayAccess does not understand registerCEEOnly

5.2   INCA V7.4.7

5.2.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended. With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.2.2   New Features and enhancements

- All news of the current INCA Service Pack see
  `INCA-V7.4-SP07-Whats-new.pdf`.

5.2.3   Known issues of INCA V7.4.7 – Important Hints

- NA

5.2.4   Known issues solved with INCA V7.4.7 – Important Hints

- See also Known issues solved with INCA V7.4.6 HF2.

- #729666 Polling signals are set to inactive when opening EE
  Under certain conditions, the polling signals are set to inactive, after opening an experiment in the EE. The dialog shows these signals in the warning dialog with a note that the signals don't fit into the desired rasters and have been set to inactive. The workaround is to open the Variables Configuration and activate these signals again.

- #720329 ProF: Message "StorePermanentlyToTarget failed" if PROF configuration is installed on D: Drive and NtfsDisable8dot3NameCreation Reg Key is set to "2"
  INCA supports 8dot3, but only if it is enabled for all volumes used by INCA and the ProF configurations. Mixed volume configurations for the INCA installation and the ProF configuration, for example, one volume with enabled 8dot3 and one without, are not supported. On systems with mixed volume configurations (i.e. setting 2: 8dot3 name creation on a per volume basis), 8dot3 will only be supported when INCA installation and ProF configuration are stored on the same volume, e.g. both on C:\.
  Therefore, only the following 8dot3 settings are allowed for installing and using ProF configurations:
  - 0 8dot3 enabled for all volumes on the system -> INCA installation and ProF configurations are allowed on any volume
  - 1 8dot3 disabled for all volumes on the system -> INCA installation and ProF configurations are allowed on any volume
  - 2 8dot3 name creation on a per volume basis -> INCA installation and ProF configuration must be on the same volume, e.g. both on C:\

- #738771 Measurement of SOME/IP signals not possible
  If SOME/IP signals have multiple descriptions of the containing frames with different channel descriptions, the signals were discarded and not available for measurement in INCA. INCA showed the following warning during ARXML import:

"WARNING(205): Duplicated SOME/IP frame (EthernetChannels)), ID: <xyz>, contained signals: <list of signals>"

5.2.5 Bug Fixes and Improvements

- Notes:
    - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
    - EHI calls are listed in increasing order

EHI #	Title
510264	[FETK-T1/ INCA VSD] Predefined Rasters for arrays are different
647554	INCA wrong dataset after A2L project correction with prior wrong selected project
654722	[WBID976698044] UndefinedObject does not understand x
688861	EE, VUI: Returning to INCA not possible after switching to desktop while VUI text editor opened
704451	[NetWBID1971169032] System.InvalidOperationException: Element 'T_Median\CalcDev' with ID ID681521042 not found in input XML for VSD
705869	INCA Variables (in Backroundrecorder) fall out without any Configuration Dialog in case of project change with other Raster Configuration
708788	8 x [WBID3170559123] (ExEsAsyncScheduleTaskError) An exception has occurred: Can not schedule a task at system background priority, since submitPriority = (taskPriority - 1)
712852	[WBID4186591672] UndefinedObject does not understand acquisitionDict
714151	"Options - User Options - Import": After importing an ini file with a missing entry, the missing option is reset to the default value after restarting INCA, but should use the old setting displayed in the Options dialog.
720143	EE, VSD: Content from Variable Info Panel is not updated after changing the selection in Source Tree
720329	ProF: Message "StorePermanentlyToTarget failed" if PROF configuration is installed on D: Drive and NtfsDisable8dot3NameCreation Reg Key is set to "2"
721622	[NetWBID1462754262] System.NullReferenceException: Der Objektverweis wurde nicht auf eine Objektinstanz festgelegt.
721797	[WBID1574320057] Array's should not implement this method
722071	[WBID306560295] OrderedCollection does not understand includesKey:
723260	COSYM 3.3 crashes when using vNetBoa.fmu (solved with corresponding BOA V2.39 included in INCA V7.4.5)
723425	[WBID3448451260] OrderedCollection does not understand includesKey:
723561	HWC: Double-clicking on a cell containing the project opens the project definition dialog. The next click (double click) selects the dataset in the Project Definition Dialog. This accidentally changes the dataset of the project.
723729	Value of virtual calibration is reset to initial value from A2L on restarting a workspace
723874	EE: After activation of Slewing the label is not complete visible
724285	EE: Input is from inactive Calc Signal is unexpected active again after Save, close and reopen EE
724479	File Name not updated by Template update when existing file name is chosen (directory and file name changed simultaneously)

726692	CDM: Label Viewer cannot be used by hotkey [Enter] or double click, since Grid Editor was released. Solution: F12 is the new hotkey for Label Editor in MultiColumn and classic CDM view.
727420	INCA Experiment Menu "Instrument" is doubled after switching Layers
728160	EE : Could not match Dialog does not appear for CHARACTERISTICs selected only in (default) recorder (not in EE)
729011	During start measurment INCA might crash: [WBID714412039] UndefinedObject does not understand multiRecorderFassade
729666	Polling signals are set to inactive when opening EE. Please see the known issues section for details.
730766	API: ResetValueToRP does not work with group curve axis. Documentation updated.
731246	XETK A1b not downloading new configuration to XETK-S16 when only changing # of OMD handles
731339	EE: Oscilloscope within VUI not working
732268	WB occurs while flashing via API: [WBID3239002614] (ExMessageNotUnderstood) An exception has occurred: EtasDynamicEmuRAMV1CalibrationMethodWrapper does not understand canManageMemoryPages
732325	VSD: Size from Vector is not correct when Bit Mask is used
732952	EE [NetWBID3287050334] System.InvalidOperationException: Sequence contains more than one matching element - occured when starting a visualisation with some BIT instruments
733390	Recording does not start if measurement variable has "<" or ">" symbol in VTAB definition
733845	EE: Getting WB([WBID1889308785] MCSDummyCalibrationRecordingManager does not understand getDisplayTypeDicFor:) when try to write Lab File from EE, when EE was opened via CDM
734137	MDF Array Index without Underline: "[NetWBID2319331352] System.InvalidOperationException: Variable 'M_MATRIX.DIM22[0][0][0]\ETK-Testdevice:2' not found in device 'ETK-Testdevice:2'" when added special variables and reopened VSD again
734167	EE, VSD: Possible that Raster Matrix is not updated when many Labels are multi selected
734186	EE Battery Imbalance Table: Moving vector to BatteryImbalanceTable: [NetWBID1921432531] System.NotSupportedException: This type of CollectionView does not support changes to its SourceCollection from a thread different from the Dispatcher thread.
734188	BIT:"[NetWBID3511397514] Etas.EE.Instrumentation.InstrumentException: Exception in plugin Etas.EE.BIT, Version=1.0.0.0, Culture=neutral, PublicKeyToken=c9b6e760b808c9f9 after raising OnMeasurementStateChanged event." can occur during Drag and Drop
734319	Array index does not work if "use display indentifier" is active
735283	Battery Imbalace Table (BIT): Change widget from (any widget) to BIT always opens on default position
735336	HW Reinit: INCA crash without walkback during device initialization after flashing
735741	Unable to read VX_Config.ini file if path contains special characters (such as umlauts).
735857	EE_CALC SIGNALS: "[WBID884544431] EBADF (9) MISSING 10 in cfs" after creation 2 times new calc signals and closing the editor
736311	INACTIVES / Calc Signals: Depending inactive labels of calc signals become active

736483	EE:"[WBID4195639978] EtasContainerMeasureWidgetModel does not understand setDeferUpdate" can occur when change widget to osci when new layer was copied in VSD
736568	Performance: EE is frozen after deletion of two calculated signals in OpenEE Instrument (occurs sporadic)
736574	Performance Battery Imbalance Table (BIT):Setting labels inactive takes longer than in Osci or Measure Table
736575	MPM - User selection in "5 From" is set to default after action was executed
736792	Did not read HEX file (*.x)
736981	Datasets of INCA 7.4.3 database not readable in INCA 7.4.5
736999	EE: Dependend Parameters Confirm-Dialog is not anymore popping up first time when open a workspace with errors in depending parameters
737397	CDM: Possible to create unwanted new folders, even if CDM is not saved.
737548	CDM - Missing expected error message box (Error "Could not open file")
737736	EE Calculated Signal Editor: Possible that calc signales are removed from OpenEE Widgets when several times open and close calc signal editor
737840	EE Calculated Signal: Inactive Calc Signals are removed from EE when changing the Calc Signal in the formular (editor)
737952	EE/VSD/Calculated Signal: Inca is crashing ([NetWBID1364170689] System.InvalidOperationException: Variable 'nATLmax\CalcDev' not found in variable configuration) after deletion of calc signal and opening variable configuration afterwards
738037	Measure Data from ECU not stored in mf4 file if special EXP-files are used due to a mismatch of device name of the original workspace to the one being used.
738075	Calculated Signal is removed from the recorder if it is only in an oscilloscope and is being edited
738325	Change of value is not visible in INCA. Value is freezed till neigbour signal is added. Note: Solved in HSP V13.6.1
738426	ASAP3: After adjusting a characteristic value, the experiment can no longer be operated in all cases.
738771	Measurement of SOME/IP signals not possible
738797	EE_UNDERSCORE: measurements get kicked out from default recorder when labels are also in multirecorder and a calc signal is changed
738844	ES8xx CAN/FLX/LIN: After upgrading from INCA V7.4 SP5 to INCA V7.4 SP6, initialization and monitoring with ES8xx CAN/FLX/LIN is not possible.
739204	When flashing XETK and disconnect or power OFF during flashing: [WBID638856137] EtasWorkingState does not understand buttonStrings
739297	CDM freeze during Compare action
739377	Due to raster full removed label is still shown in Oszi instead of the one that is still active (only on second opening of EE)
739990	Flashing fails due to default setting of INCA's ISO15765 TX Notification in HWC to "estimated". Recommendation: The option "estimated" the standard setting for years due to better performance. If not supported switch the setting to "accurate".
740347	[WBID4186591672] UndefinedObject does not understand acquisitionDict
740672	MPM source and target lists contract on their own after the MPMD has idled for a while
740810	Genesis Installation error mail logs saved in the installation directory
740861	MPM: Incorrect entries in source list after clicking on a grouped device after opening MPM with calibration access deactivated
740865	Error in the database
741145	INCA and ETK-Tools with ETK: Measurement aborted after ECU reset when TRACE Mode is used

741802	[WBID3421345940] OrderedCollection does not understand includesKey - When the INCA Experiment is initialized
742604	Trigger options are changed unexpected
743419	CANFD controller: Wrong CANFD_CONTROLLER_MODE is set when selecting CANFD controller mode.
743761	WB opening MPM when no device selected in HWC - [WBID2737893465] UndefinedObject does not understand device
743851	[WBID564490576] EtasCalibrationEditableVerifier does not understand tryAddAddressRangesWithoutReconf:length:
743870	Out-of-memory error on INCA oscilloscopes with Intel Iris Xe onboard graphics on notebooks
744185	WB occurs while Creating Hex File for flashing ([WBID3239002614] (ExMessageNotUnderstood) An exception has occurred: EtasDynamicEmuRAMV1CalibrationMethodWrapper does not understand canManageMemoryPages)
744238	[WBID1362343877] unsupported type / Opening html file in multi-byte path caused system down
744326	CAL-Wakeup behaviour of INCA differs between INCA versions (INCA7.3.5 - INCA7.4.x).

5.3   INCA V7.4.6 HF2

5.3.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.3.2   New Features and enhancements

- See INCA V7.4.6

5.3.3   Known issues of INCA V7.4.6 HF2 – Important Hints

- See INCA V7.4.6

5.3.4   Known issues solved with INCA V7.4.6 HF2 – Important Hints

See also INCA V7.4.6 and INCA V7.4.6 HF1. Additionally, the following issue solved:

- #741145 INCA and ETK-Tools with ETK: Measurement aborted after ECU reset when TRACE Mode is used
  The initialization of the trace module is changed in order to setup the trace module in case of an ECU soft-reset.
  An ECU hard-reset has worked already without problems.
  This is needed for INCA and for ETK Tools in case of another XCP master than INCA.

5.3.5 Bug Fixes and Improvements

- Notes:
    - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
    - EHI calls are listed in increasing order

EHI #	Title
741145	INCA and ETK-Tools with ETK: Measurement aborted after reset when TRACE Mode is used.
738037	Measure Data from ECU not stored in mf4 file if special EXP-files are used due to a mismatch of device name of the original workspace to the one being used.

5.4 INCA V7.4.6 HF1

5.4.1 Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.4.2 New Features and enhancements

- See INCA V7.4.6

5.4.3 Known issues of INCA V7.4.6 HF1 – Important Hints

- See INCA V7.4.6

5.4.4 Known issues solved with INCA V7.4.6 HF1 – Important Hints

See also INCA V7.4.6. In addition, this KIR issue solved:

- #738221 CDM Multi Column shows wrong compare result

    If QM Basic is NOT installed or QM Basic is inactive
    AND
    the CDM Multi Column is used
    AND
    NOT all selected calibrations fit into the table view, so not all are displayed
    AND
    the user jumps to a calibration (via HotKeys) that is not displayed in the current view of the table
    AND
    the source is not equal to the destination

THEN

INCA shows wrong values (shows the same values) and wrong comparison results (show they are the same but should be different) in the columns.

If a user calibrates such a calibration, the destination will erroneously receive the same value.

Affected INCA Versions: V7.4.3 up to V7.4.6

Workaround:

Do not use Multi Column view.
  OR
Use (activated) QM Basic
OR
Scroll to the calibration but do not jump (via HotKeys).

- #731375 E891:FLX Channel A and B connected. Sometimes the error: "Unexpected result code when adding a BOA OCIFLX frame filter." is displayed.
  Then the Signals from channel B are not visible in the INCA Experiment.
- #738844 ES8xx CAN/FLX/LIN: After upgrading from INCA V7.4 SP5 to INCA V7.4 SP6, initialization and monitoring with ES8xx CAN/FLX/LIN is not possible.
  Workaround: A new installation of INCA V7.4 SP6 or a repair of this installation solves the problem.

5.4.5   Bug Fixes and Improvements

- Notes:
  - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - EHI calls are listed in increasing order

EHI #	Title
738221	CDM Multi Column shows wrong compare result
731375	E891:FLX Channel A and B connected. Sometimes the error: "Unexpected result code when adding a BOA OCIFLX frame filter." is displayed. Then the Signals from channel B are not visible in the INCA Experiment.
738844	ES8xx CAN/FLX/LIN: After upgrading from INCA V7.4 SP5 to INCA V7.4 SP6, initialization and monitoring with ES8xx CAN/FLX/LIN is not possible.

5.5   INCA V7.4.6

5.5.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.5.2   New Features and enhancements

- All news of the current INCA Service Pack see
  `INCA-V7.4-SP06-Whats-new.pdf`.
- Performance improvements:
  - #630147 Reinitializing the hardware takes too long. Improved by a factor of two.
  - #694904 Do not initialize all devices after flashing only one ECU/ETK.
  - #703427 Poor Performance of INCA after changes in HWC while EE opened. Improved by a factor of 10.
  - #720596 Time taken to Open EE in INCA V7.4.6 improved compared to INCA V7.4.5
  - #725376 MultiRecorder in EE: Open VSD improved compared to INCA V7.4.5
  - #731202 EE Rastercheck Performance: EE is not responding after adding measurements to XETK device with confirming raster full behavior
  - #735474 INCA V7.4.5, DBB: Experiment import of huge experiment leads to "Not responding"
  - #725752 INCA freezes in CDM during a compare with customer datasets (with many subfunction/variables used in several topfunctions)
  - #727922 INCA-COM method Experiment_Dispatch::GetMeasureValueInDevice() becomes extremely slow when the Recorder Manager is open.
    Improved: With INCA V7.4.6, the performance is the same as when the Recorder Manager is closed.

5.5.3   Known issues of INCA V7.4.6 – Important Hints

- #729666 Polling signals are set to inactive when opening EE
  Under certain conditions, the polling signals are set to inactive, after opening an experiment in the EE. The dialog shows these signals in the warning dialog with a note that the signals don't fit into the desired rasters and have been set to inactive. The workaround is to open the Variables Configuration and activate these signals again.
- #731074 Vector VN1670 - device cannot be initialized
  and related
  #724382 Error when measuring with INCA LIN using VN1670 Host
  If a VN1670 is in use and the device can be found, but it is not working properly (channels cannot be initialized or timestamps are wrong), it is recommended to perform a factory reset on the device.
  Note: Due to missing APIs, there is currently no way for INCA to detect a critical configuration of the device.

5.5.4   Known issues solved with INCA V7.4.6 – Important Hints

- #713959 AUTOSAR_LIN : MultipleAutosarFileContainer with the same formula-name but different formula may use a wrong formula
  Problem can occur when

- several AUTOSAR files (ECU extracts) are read into INCA as a container (not with a single AUTOSAR file)
- the different AUTOSAR files contain conversion formulas with the same name but define different formulas

- #720329 ProF: Message "StorePermanentlyToTarget failed" if PROF configuration is installed on D: Drive and NtfsDisable8dot3NameCreation Reg Key is set to "2"
  Some (old) ProF configurations might require the usage of the 8dot3 file name format of Windows for correct execution. INCA supports 8dot3, but only if it is enabled for all volumes used by INCA and the ProF configurations. Mixed volume configurations, e.g. one with enabled 8dot3 and one without, are not supported. In addition, the 8dot3 settings must not be changed between the installation and usage of a ProF configuration, e.g. installing it with enabled 8dot3 and flashing with disabled 8dot3 will not work.
  When installing the very first ProF configuration on a PC, INCA now checks the 8dot3 configuration of the PC and a warning message will pop up, if the volume of the selected ProF installation folder has a different 8dot3 setting than the volume of the INCA installation.

- #722470 Not possible to see which ActiveCalibrationPage was in use in measure file
  IF
  in User Options --> Experiment --> Support for Big Data Recording --> Enable Big Data Support is set to Yes
  AND
  in User Options --> Experiment --> Support for Big Data Recording --> Write Calibration Events is set to Yes
  THEN
  INCA will initialize the Variable(s) ActiveCalibrationPage always with RP
  Note 1: After a page switch the value is correct
  Note 2: The always included Variable $ActiveCalibrationPage is correctly recorded

- #727771 WB ([NetWBID2319331352] System.InvalidOperationException: Variable 'zfs_nvram_map[157][14][0]\XCP:1' not found in device 'XCP:1') when try open VSD
  If
  the setting "use underline for measure arrays = no" is used
  AND
  the project (A2L) contains indexed items, e.g. my_map[157][14][0]
  AND
  the EE and VSD is opened
  THEN
  INCA might crash with WB.
  Workaround: Switch "use underline for measure arrays" to YES.

- #733173 Array Index without Underline: Possible that not all element from Measure Array / Matrix is added to EE when in base name Index with _ is used
  and
  #729810 Array Index without Underline: Incorrect display, API access does not work
  Measure array handling in INCA
  INCA splits up measurement arrays in single cells. To get names for the single cells INCA adds an index to the array name. The option "Use underline for array ..." allows to add an underline before the index or not.
  Independent of the underline the names for the cells generated by INCA must be unique. By this the ASAP2 file must not contain elements that have the same name as the generated array cells.

> If there are measurements that have the same name as the generated ones INCA will use the objects defined in the ASAP2 file, not the generated ones.

- #737953 If flashing a device in the EE and using the option "Current" in the MPM as the re-init behavior, the Calibrations are removed from the Recorder and missing in the measure file
Notes: This is not an issue when using the option "All" in the MPM as the re-init behavior.
This is not an issue when flashing from HWC (and EE is closed).

5.5.5   Bug Fixes and Improvements

- Notes:
  - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - EHI calls are listed in increasing order

EHI #	Title
556982	EE: Variables Configuration does not show the checkmark for Calc Signals in Background Recorders
561815	EE: Possible that after Copy&Paste from Recorder the Manage Recorders shows per Recorder more labels than in VSD Variables Configuration
630147	Reinitializing the hardware takes too long. Improved by a factor of two.
646300	VX1161 Integration
648586	INCA VSD calculates the number of bytes incorrectly for array and matrix values
660240	Recorder: NetWBID2606054217 System.Data.StrongTypingException: The value for column 'Id' in table 'Recorder' is DBNull.
670134	[WBID481274964] UndefinedObject does not understand specification:
676243	[WBID3826436649] UndefinedObject does not understand mdiArrange
689583	Importing A2L file with included a2l failed in case of 2Byte Char OS (reported with Japanese and Korean OS)
694904	Performance: Do not initialize all devices after flashing only one ECU/ETK.
703427	Poor Performance of INCA after changes in HWC while EE opened. Improved by a factor of 10.
706105	[WBID2023733350] EtasCalibrationEditableVerifier does not understand preCheckTryAddAddressRangesWithReconf:length:
708797	Missing "Transport Layer Instance"-Dialog in case of XCP on UDP and XCP on TCP is configured
712035	DBC containing UTF-8 characters are NOT recorded in Experiment when MDF V4.1 and MDF Write Compressed is Yes
712094	EE: When Recording, in Ongoing Context Menu, Remove from Experiment is unexpected Enabled for VSD on Var Config Tab
713273	FETK-T3 "stim.cfg" growing over time and may have exceeded the size allotment in the file system.
713548	Option "Write Groups and Functions to measure file: [WBID4009606501] (ExCLDTKeyNotFound) Key not found.
713589	EE: Calc Sig in Background Recorder are not handled correct in VSD-Var Config Tab - there you can not see to which Background Recorder they are added
713959	AUTOSAR_LIN : MultipleAutosarFileContainer with the same formula-name but different formula may use a wrong formula

714098	"Go to Inca Main Window" from HWC or experiment does not work when the main window was/is minimized
714295	EE: Hotkeys (like F4, Alt-T) do not work when Calibration Window is selected in EE
714998	INCA does not reinitialize automatically and download the working page on reconnect
715470	Drawing problems at a table list when the column's splitbar is moved
720023	EE: Possible that Labels which are shown in No Match dialog are still part of EE
720132	Weak Bounds are changing in CDM
720329	ProF: Message "StorePermanentlyToTarget failed" if PROF configuration is installed on D: Drive and NtfsDisable8dot3NameCreation Reg Key is set to "2"
720596	Performance : Time taken to Open EE in INCA V7.4.6 improved compared to INCA V7.4.5
722346	ETAS License Manager: INCA Evaluation License - and MDA Standalone FNE License Online Activation cause "Error code 983140 is not mapped"
722470	Not possible to see which ActiveCalibrationPage was in use in measure file
722834	Device are removed from Workspace when group devices after import and overwrite the same Workspace
723151	DB: Getting unexpected Monitor Log entry after creating new KVL
723370	High Res don't show vertical scrollbars
723691	CDM: Maps and Curves might be not copied
723951	API: With "Parallel hardware initialization" return values are sent too early. Not all devices are initialized.
724210	ECU is switched off/on the ECU is restarted without a WP and trace measurement was not possible
724306	SOME/IP Events with version = ANY are not found
724382	#724382 Error when measuring with INCA LIN using VN1670 Host. Recommendation: perform a factory reset on the device.
724415	ETAS License Manager: HoS Lima online activating with an already used FNE Act-ID brings up an unclear error mesaage
724515	Compairing calibration value by axis soft limits, wrong soft limits was written in the result HTM.
724644	EE: Possible that not all labels added again to EE (after use of "Already Use Filter")
725376	Performance : MultiRecorder in EE: Open VSD improved compared to INCA V7.4.5
725752	INCA freezes in CDM during a compare with customer datasets (with many subfunction/variables used in several topfunctions)
726289	ETAS License Manager:Copy Address to Clipboard did not work
726397	HW-Reinit: Default action for a device in MPM is not selected, if the "select next / auto close" checkbox is toggled during a MPM session
726516	ES820, IP-Manager: Active/Passive State intermittent on multi subnet scenario
726520	HW Reinit: After flashing an uninitialized device the initialization behaviour of MPM is not correct
726663	Memory Page Manager: Resizing behaviour of MPM UI is incorrect
726665	Grouped ECU´s are not calibrated when changed together
726832	HW-ReInit: The order of reinitialization on close changes depending on the actions performed, but should be a consistent order of device initialization regardless of what actions are performed.
726993	BR_XETK-S3.0A RasterCheck: Warning: The config features of the raster check didn't match the config features of the user project.
727076	"Connect device window": Window is not active for using of keyboard

727187	EE: Possible to get WB([WBID3721217057] UndefinedObject does not understand isHWActive) when try to add Adaptive Characteristics with Calibration Recording to EE
727381	Wrong translation in Japanese Dialog "Confirm - Reinitialization Behavior"
727434	EE: Inactive variables added to default and background recorders with drag and drop (but should not)
727656	Recorders in VSD: Impossible to remove CalcDev variables from Manage Recorders window
727691	EE: Remove from Experiment does not work correctly for Virtual Measurements
727771	WB ([NetWBID2319331352] System.InvalidOperationException: Variable 'zfs_nvram_map[157][14][0]\XCP:1' not found in device 'XCP:1') when try open VSD
727786	HW-Reinit: The default action selection for devices with desired default action "Flash prog." does not work correctly
727789	HW-Reinit: "Select Next / Auto Close" is wrongly not enabled if action is automatically switched because of changing calib. access
727883	ETAS License Manager: The license is (wrongly) shown as available after offline return
727922	Performance: INCA-COM method Experiment_Dispatch::GetMeasureValueInDevice() becomes extremely slow when the Recorder Manager is open. Improved: With INCA V7.4.6, the performance is the same as when the Recorder Manager is closed.
727956	Array Index Without Underline: Possible that underscores are unexpected removed after save, close and reopen EE
727969	Array Index Without Underline: Possible that wrong label is added to KVL
727980	Japanese OS: INCA imported CANdb labels were not displayed on VSD
728016	LAYOUT ROW_DIR is not respected, COLUMN_DIR is used instead if 2D MEASUREMENT arrays are used as calibration variable in #RAMCal devices.
728023	Variable Order Dialog: Item focus is not updated when pressing up/down button
728027	Menu icons small on 4k screen with 125% zoom factor
728042	MDF Array Index Without Underline: Online Help updated
728055	ASAP3 send Values delayed in comparison to INCA recording. Recommendation: Switch ASAP3 option = Old Measure Mode. Then GET ONLINE VALUE always sends the latest sample, but samples may be lost.
728058	Variable Order Dialog: Add support for CTRL+A hotkey to select all entries
728097	CDM: For Data Transfer File cases there is no difference in Multi Column shown in Rescale Axes Pairs (scale values are not compared)
728347	FETK:2 cannot be moved between ES89.1 and ES891.2 while replacing systems
728358	VSD, Recorders: Possible that label is added unexpected to Default Recorder (even if Record Only is unchecked)
728371	[WBID2358313750] UndefinedObject does not understand writeSingleShotValue:timeSource:
728650	ETAS License Manager: Offline migration step 2 grayed out
728685	Recorders in VSD: After deleting a Background Recorder from a virtual label in VSD, the label will remain in the Manage Recorders window
728742	HW-Reinit: System with several sibling devices, which do not support single device initialization, are not correctly initialized after flashing
728982	Messagebox Appears during init, even if ASAM connection is active. Notes: New option to the device so the confirm page swith setting for each LERT [XF]ETK device can be changed.

729019	COM API - Copy method does not return Boolean (this is a mismatch in documentation). Correct: return type = DataBaseItem; returns the copied object or null
729091	CDM View not refreshed when filter is used in Function View (Grouped elements and functions were not considered when the list was updated)
729743	ETAS License Manager: It is possible to remove server lic-file with borrowed licenses. After that, it is not possible to return the borrowed license.
729810	Array Index without Underline: Incorrect display, API access does not work
729848	Usability: EPROM ID for ASAP2, DS and ECU are not aligned to make comparing easy
730014	ASAP3 Manual: Table with Modes for ACTIVATE RECORDER (Command 43) is missing
730116	CDM: Connect DCM file to ASAP2-Project: [WBID2633249304] RBTypedValue does not understand setIntervalNoCheck:
730146	CDM Settings Dialog: some Options are missing (Documentation corrected; options no longer needed/available)
730261	CDM, Execute "Check - Rerun all checks" leads to WB [WBID2127087418] Array does not understand compareGreaterThan
730535	EE, VSD: WB if all lables of a VUI experiment are deleted in VSD (which is not supported): [WBID4195639978] EtasCEECustomerWidgetVUI does not understand closeWithoutAskingForPermission
730585	If option "use underline for measure arrays = no" [NetWBID2319331352] System.InvalidOperationException: Variable 'ResM_RstBuf_Element[0][4].CallTree\XCP:1' not found in device 'XCP:1'
730692	HWC, MPMD: Actions should be greyed out if To and From are both empty
730715	DB: Dependent from the used language the Language Icons are scaled incorrectly
730813	INCA second flash of master Slave device is not working for one Device
730820	INCA Multi Initialization dialog stays open when pressing ok --> Inca must be closed by task manager
730823	INCA throw out Variables from experiment for any reason while flashing grouped device
730999	CDM: "[WBID1962272417] SmallInteger does not understand state:" when doing a compare including a label which is a memory block which does not support significant digit calculation
731074	Vector VN1670 - it is not possible to initialize the device. Recommendation: perform a factory reset on the device.
731111	[WBID1633990029] UndefinedObject does not understand writeSingleShotValue:timeSource:
731202	EE Rastercheck Performance: EE is not responding after adding measurements to XETK device with confirming raster full behavior
731892	CDM: Incorrect highlighting of datasets. In the Comparison Table the datasets should be highlighted which are unequal according to selected labels
732188	Calculated signals are not working after importing in EE in case something changed in the signal name/device in the formula manually (and greyed out) before the export
732233	ETK Tools: XCT - Convert project to fixed configuration doesn't work
732463	Open EE might INCA crash: [NetWBID2495738703] System.ArgumentNullException: Der Wert darf nicht NULL sein.
732503	ASAP3: "Log Only to file" still writes Logs both to ASAP3 window and to the file
732536	System error when exporting CDM configuration file with a name that contains 2-byte characters. [WBID3831118732] Primitive failed in: String>>#at:put: due to Value out of range in argument 2

732888	MPM: Opening MPM initializes all devices instead of just the selected in case of XCPonTCP
733173	Array Index without Underline: Possible that not all element from Measure Array / Matrix is added to EE when in base name Index with _ is used
733360	INCA message appears unnecessary in HWC when it is opened out of experiment
733636	CDM: Option "Instant Compare-Destination Highlighting": The Dataset which is different is not marked gray
734170	INCA Checksum Calculation is not shown in MPM
734185	Experiment: "Read Calibrations from File" does not work correctly and does not copy all values in case several DCM-files are used
734351	In Configure Hardware Window INCA is not able to initialize a single hardware , instead it's initialising all hardware's
734378	ODX-LINK: INCA COM-API method IncaOnlineExperiment.GetOpenLogicalLinks() fails and therefore it was not possible to send a HexService or DiagnosticService with ODX-LINK.
734498	Flashing bootloader fails with INCA V7.4.5
735083	Calculated Signals EE: When deleting a calc signal which is used double in Measure Window only one is deleted
735341	HW init: First flashing procedure after grouping devices is not performed correctly
735357	HW init: Variables are removed from experiment after flashing grouped devices
735469	ETAS License Manager: Cannot upload offline migration request if no license present on online PC
735474	INCA V7.4.5, DBB: Experiment import of huge experiment leads to "Not responding"
735667	Error messages while calculating dependend parameters appear as pop up instead as monitor message
736170	EE Calculated Signal: Trigger signal is not removed from recorder when deletin depending calc signal
736258	ES420: Not possible to download configuration
736312	VN1670 Prof Port selection of LIN-Ports not possible
736578	MPM - Minimum size of MPM is not correct
736935	Add device in HWC and init new device in HWC with open EE: [WBID2375816792] UndefinedObject does not understand acquisitionManager
737503	If a connected device is flashed in the HWC and another device is not connected, the labels in the EE of the device that is not connected will be lost.
737953	If flashing a device in the EE and using the option "Current" in the MPM as the re-init behavior, the Calibrations are removed from the Recorder and missing in the measure file

5.6   INCA V7.4.5

5.6.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.6.2   New Features and enhancements

- All news of the current INCA Service Pack see
  `INCA-V7.4-SP05-Whats-new.pdf.`
- Performance improvements:
    - #670196 Execute HW reinit only for not already initialized devices (but no complete reinitialization for all HW)
    - #676028 Open empty EE by approx. 30% improved.
    - #684797 Very long preparation time or walkback on multiselect of many signals for a Raster in case the first signal could not be selected for any Raster.
    - #695105 Minor change in calculated signals leads to long waiting time due to reload of the experiment
    - #725310 The update of the Experiment takes 30 minutes after removing layers within Variable Configuration Dialog. Improved to half a minute.

5.6.3   Known issues of INCA V7.4.5 – Important Hints

- #722470 Not possible to see which ActiveCalibrationPage was in use in measure file
  IF
  in User Options --> Experiment --> Support for Big Data Recording --> Enable Big Data Support is set to Yes
  AND
  in User Options --> Experiment --> Support for Big Data Recording --> Write Calibration Events is set to Yes
  THEN
  INCA will initialize the Variable(s) ActiveCalibrationPage always with RP
  Note 1: After a page switch the value is correct
  Note 2: The always included Variable $ActiveCalibrationPage is correctly recorded
- #727771 WB ([NetWBID2319331352] System.InvalidOperationException: Variable 'zfs_nvram_map[157][14][0]\XCP:1' not found in device 'XCP:1') when try open VSD
  If
  the setting "use underline for measure arrays = no" is used
  AND
  the project (A2L) contains indexed items, e.g. my_map[157][14][0]
  AND
  the EE and VSD is opened
  THEN
  INCA might crash with WB.
  Workaround: Switch "use underline for measure arrays" to YES.

5.6.4   Known issues solved with INCA V7.4.5 – Important Hints

- NA

5.6.5   Bug Fixes and Improvements

- Notes:
    - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
    - EHI calls are listed in increasing order

EHI #	Title
510387	Transformer: FIM labels are shown as inactive when labels are available in CSE and you call the menu item "Add transformer variables"
584924	Recorders: Unable to activate background recorder after deleting dependent Calculated Signal.
592726	VSD: No Match Variables reappear after deleting on reopening VSD
615240	Possibly getting empty value after Increment from VTab Range Com Axis in Comb Ed
619043	If decimal places of axis is changed via display configuration then the effect is not visible in Exp. graphically
640119	[WBID3847694341]UndefinedObject does not understand x
643182	EE: Possible that inactive labels are shown in CSE
650928	INCA loses trigger settings
667468	When INCA 7.3 crashes during a repair of a database then all experiments of that database are from old format
667798	Wrong message: Import from a layer from ee64 format in correct workspace and experiment and correct hardware says that signals are deleted but are still present
670196	Performance: Execute HW reinit only for not already initialized devices (but no complete reinit for all HW)
676028	Performance: Open empty EE by approx 30% improved.
681049	Open EE, select Layer, open VSD, select some measurements, select again to OSCI: [NetWBID3024954269] System.InvalidOperationException: Die Sammlung wurde geändert. Der Enumerationsvorgang kann möglicherweise nicht ausgeführt werden.
682179	[WBID1584027916] UndefinedObject does not understand removeCallback:receiver:selector:clientData:
682764	Assigned Project files (e.g. VXConfig.ini) can not be removed (set to empty) in HWC - (general "Project" behavior e.g. A2L, AUTOSAR Cluster, ...)
684797	Performance: Very long preparation time or walkback on multiselect of many signals for a Raster in case the first signal could not be selected for any Raster.
684960	An error occurred while switching from Table to List within CDM. [WBID2723012647] UndefinedObject does not understand items
686296	[WBID1793462298] Primitive failed in: Object>>#at: due to Index out of range in argument 1
686619	[WBID680400614] UndefinedObject does not understand result
686956	INCA VSD shows wrong size for a MAP
687368	HWC: Selection in "Add HW device" is changing if tree above is expanded and collapsed again
688260	[WBID831420538] Primitive failed in: Object>>#at: due to Index out of range in argument 1
695105	Performance - minor change in calculated signals leads to long waiting time due to reload of the experiment
700551	[WBID1864486077] OrderedCollection does not understand positionSplitbar1

701297	Autosar File can not be read if the AUTOSAR file contains identical elements with the same short name on the same level.
702976	INCA V7.4 ->Menu Help -> Change German "Unterstrützung" to "Support"
704241	INCA Record Only Variables that changed to Arrays are not monitored in any Could not match Dialog
705729	CDM is not im focus if CDM opened from EE
707209	[WBID3650652376] UndefinedObject does not understand do
707505	VSD shows wrong number of selected varibles (simple addition of variables from all layers)
708007	EE: Possible that not all not filled Pre Selected Rasters are used in VSD
708165	INCA ARXML can not be read if the file contains identical elements with the same short name on the same level.
708252	[WBID2975944050] (ExEsAsyncScheduleTaskError) An exception has occurred: Can not schedule a task at system background priority, since submitPriority = (taskPriority - 1)
708743	CDM: Different behavior when using Axis -> Edit for Axis with Rescale Axis Pairs second time and before Label was added to New or Existing Comb Editor
709161	Expected value and real is different in Calibration scenario editor
711030	Suboptimal size of measure array selection dialog with zoom=175%
711687	CDM freezes when selecting a function
711948	Calibratable window glitches during resize in CDM
712229	Combined Editor with Map data, open Properties and change "show process point" into Yes: [WBID111135867] UndefinedObject does not understand calibrationMethodWrapper
713249	Deleting function in CDM does not get updated.
713273	FETK-T3 "stim.cfg" growing over time
713430	Extended Logging Help files are missing
713463	KVL Export Lab File Dialog Prefill usability is not good.
713596	EE: New added Calc Signal is not selected in Manage Calc Signal
713685	High CPU usage when certain dialogs are open
713987	INCA Calculated Signals are not overtaken when selecting in VSD
714042	Measure Arrays are not added to Experiment if "select all" function is applied to multiple lab files
714107	Export user options, override of a blocked file not possible, Error dialog needed.
714112	Edit Calibration History, INCA hangs: EtasProjectDefinitionDialog does not understand isOpenViewersEnabledInHistoryBrowser
714593	Huge splitting cursor in CDM VSD with zoom=175%
714670	XETKs and FETKs: Device ECU-RESET request can lead to ECU-RESET without checking INCA reset option in INCA automatic mode
715132	FETK-T5: TRACE Measurement with 1ms raster. The jitter of the time stamps for trace measurement is reduced.
715537	ERROR MessageBox [CfsError EIO (5) I/O error [32]] pops up when deleting an active database
715587	ETAS License Manager: ETAS License Manager not uninstalled after uninstallation of the related products
715795	INCA non-responsive during running of engine
716605	ODX-LINK: Snapshot missing data when measuring in parallel
716812	XCP: The maximum number of memory segments does not correspond to the XCP specification (INCA: 200 / XCP-Spec 255)
717764	Lab file Import/Export issue because of used "Display Identifier"
717778	EE: Possible geeting empty entry for VTAB after calibration action

717917	FETK device selection: Device selection is wrongly set back to default after deleting INCA temp
718173	ETAS License Manager: Lic file is not validated, any file is accepted as lic file and copied to "C:\ProgramData\ETAS\FlexNet"
718535	EE: Possible to get entry entry when using Fill With Value for VTab Range
718643	Not possible to use Kvaser Virtual CAN bus in INCA V7.4.2
718660	INCA DB: File name not automatically offered in some cases (not supported Chars) during A2L File write and create HEX
718817	Referenced axis of labels in default recorder are missing in lab file if written directly from EE
718841	In case of a not properly established TCP link the state of a XCP ECU may not be correctly reflected in INCA
719191	ETAS License Manager: No Triggering of Autoborrow after "trigger"-action in LiMa
719219	INCA_V7.4_HotkeyAssignment documents needs to be updates since hotkey changed in INCA V7.4
719485	EE: After changing Input Label for Calc Signal it is missed in MDA and is not recorded
719550	ES4xx: Target Server crash with dmp file. Recommendation: Change affected script.
719581	WB when open the configuration for signal output and select "Assign automatically": [WBID3090385552] EtasTwoDValuesAccess does not understand signalGroup
720016	EE: Possible to get value for VTab Range in graphical part from Combined Editor which is not possible to get via Fill With Value or any other action in Table Area
720206	BR-XETK S3.0 have the same IP-adress after a firmware up- or downdate
720264	ETK Tools: When in INCA in HWC is no DaqOverloadPolicy value set then the default from FETK-S is STOP
720307	Only the very first calibration action is reflected in a dependent parameter
720311	[WBID1009752044] Exception is not resumable, system error on attempt to copy into virtual map
720341	ETK/FETK Overload Error Behaviour for Default INCA Device Selection is read from wrong Device
721269	CDM: When opening VSD for the second time, there is no new function in the "Variables & Function to Process" window.
721403	Helpfile, ExtendedLoggingEnglishUS.chm, is not available
721510	DB: Not possible to delete Label from KVL when it was added to them with Index Alignment left and should be removed with Index Alignment right
721905	ETH_Monitoring : INCA V7.4.2does not receive all values if only two signals are selected
722025	LAYOUT in a2l is removed when a2l file is opened twice in asap2 editor
722204	INCA freezes after firmware update from HSP
722300	EE: Possible to get unexpected Bounds Message Box with wrong content
722471	Experiment Environment: Copy/Move Variable to Window dialog is not NLS
722489	IPMServer-Symbol no visible in Windows task bar
722707	INCA-Touch: Visualisation in EE freezes if PC at battery mode (in case of Iris® Xe Graphics)
722991	Workspace still grayed out but copy is performed when do a copy operation after cut operation
723147	EE: Possible that Calc Signal where the check was passed is not usable
723417	CDM: Expand one function after another one. WB if the function contains an array: [WBID2191665162] Array's should not implement this method

723676	Not possible to create Lookup tables in INCA V7.4 (with LookupGenerator.bat)
723727	Value of dependent parameter is not updated
723875	Function(s) cannot be added in CDM
724204	The title in the XETK or FETK tab in the HWC was wrong. This didn't effect the functionality, but it was misleading, i.e. the user was not sure which ETK type was actually used.
724475	WBID3052312104 Walkback if hardware status is opened a second time in EE during recording
724488	MPM visual help for selected device hard to see (colors, contrast): Style optimized.
724949	CDM: Getting WB([WBID2218365794] MCSInstrumentDialog does not understand updateCalibrationEditorsFor:) when change Axis Value for Cube in Grid Editor
725254	ODX-LINK: [WBID3129739937] SmallInteger does not understand match: - INCA V7.4.4/1 and INCA V7.4.5 beta 90 crash when changing ODX Extended CAN-ID
725310	Performance: The update of the Experiment takes 30 minutes after removing layers within Variable Configuration Dialog
725423	Change Dataset in HWC -> no automatic HW reinit (CRC-Check)
725707	AUTOSAR: In case frame-lengths >255 in the AUTOSAR file: [WBID598795265] Primitive failed in: ByteArray>>#uint8At:put: due to Value out of range in argument 2.
725887	CDM Instant compare creating tables with less columns in HTML report in compare to INCAv7.4.3
726322	Walkback if hardware is initialized many times after another (stress test): [WBID2049941268] UndefinedObject does not understand memoryPageManager
726952	CDM, Load dataset and save *.lab-file: [WBID1955518025] UndefinedObject does not understand uiController
727785	Walkback if first device of the MPM device list is selected and the MPM dialog has lost focus [WBID2668376735] (ExCLDTIndexOutOfRange) Index out of range.: 1

5.7 INCA V7.4.4 Build 136

5.7.1 Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.7.2 New Features and enhancements

- See INCA V7.4.4 Build 130

5.7.3 Known issues of INCA V7.4.4 Build 136 – Important Hints

- See INCA V7.4.4 Build 130

5.7.4   Known issues solved with INCA V7.4.4 Build 136 – Important Hints

- See INCA V7.4.4 Build 130.
- Additionally, an important issue of the ETAS License Manager solved (see next section).

5.7.5   Bug Fixes and Improvements

EHI #	Title
720280	ETAS License Manager: Parallel use of INCA and MDA with a local machine-based license with LiMa V1.8.9 not possible. Solved with LiMa V1.8.9.47 (HF)

5.8   INCA V7.4.4 Build 130

5.8.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.8.2   New Features and enhancements

- All news of the current INCA Service Pack see
  `INCA-V7.4-SP04-Whats-new.pdf`.
- ETK / XETK / FETK
    - Support of FETK-T5 (for NXP controllers S32G and S32Z)
    - Display Device Alias in INCA monitor messages to identify the source of the log message
    - Remove Code Check Error Behavior in HWC to avoid confusion
    - Support of XCP Multi Master measurement with DISTAB 17 (depending on device type)

    More details see What's-New-slides.
- Performance improvements:
    - The performance of the selection of many measurements in their default rasters for recording in VSD and EE was improved
    - The performance of sorting of variables in Variables Configuration Dialog was improved
    - The performance of default recorder properties in Display Configuration Dialog was improved

- o #670187 Performance HW reinit
- o #676017 Performance Open VSD
- o #710542 First time opening EE after import takes 10min, but it takes only 70sec at 2nd time in case 14.000 FLX-Monitoring signals with about 1200 Signal Groups.

5.8.3   Known issues of INCA V7.4.4 Build 130 – Important Hints

- NA

5.8.4   Known issues solved with INCA V7.4.4 Build 130 – Important Hints

- #703164 XCP_ON_FLX: If for the same FlexRay-Slot multiple send buffers (from multiple XCP slaves) for XCP commands are defined in the bus description file which are separated by a cycle repetition greater than one, the initialization will fail.

  Workaround: Use separate bus description files with only one send buffer (with arbitrary cycle repetition) per FlexRay-Slot.

  Affected versions: INCA V7.3.6 – V7.4.3.
- #708738 INCA V7.4.2: Not possible to initialize the ECU with special settings for CAN FD

  This is no issue with ES8xx.

  Affected versions: INCA V7.4.2 and V7.4.3.

  Solution:
  - The parameter for the CANFD_TRANSCEIVER_DELAY_COMPENSATION is editable again in "user defined" mode to provide best flexibility.
  - For FD-Baudrate < 1 MBaud the CANFD_TRANSCEIVER_DELAY_COMPENSATION is set to 0 by default to provide best compatibility to baud rates.
  - For FD-Baudrate >= 1 MBaud the CANFD_TRANSCEIVER_DELAY_COMPENSATION will be taken from A2L again. In case no description file is available the CANFD_TRANSCEIVER_DELAY_COMPENSATION will be set to 1 and the CANFD_SECONDARY_SAMPLE_POINT default value of 70 percent will be taken.

5.8.5   Bug Fixes and Improvements

- Notes:
  - o Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - o EHI calls are listed in increasing order

EHI #	Title
428554	VSD: Support newer file formats for "Export signal list to MS Excel" use case
513513	EE: When Recording is ongoing in the VSD for Default Recorder and Record Only possible to change disabled Option
556912	EE, VSD: Icon "To Be Added" partly not shown after selecting already used labels in the VSD opened by Trigger Editor

561584	Disabled "Default Recorder" checkbox gets enabled on re-clicking it
577110	VSD Column size changed after measure array selection dialog is closed
591840	Limits of the xy-timespan for an XY-Oscilloscope in the INCA user-options seems to be wrong
621378	[WBID3256481154] UndefinedObject does not understand isHardwareConfigurationObject
634387	[WBID2803963921] UndefinedObject does not understand contents
642074	EE: Not possible to change the size from Find Recorder Dialog
643316	[WBID1875515516] UndefinedObject does not understand @
645129	Shortcut Ctrl-i does not work in Manage Recorders
654952	"Pause"-Button on the PC keyboard has a double function in INCA (measure window and Osci)
661865	EE: Output file properties does not have any Mnemonics
662554	With Zoom > 100% the horizontal splitter position between "Project"/"Device" and "Hardware" in the main INCA window is not correct - is too narrow for the text box in "Project"/"Device". And the changed setting is not persistent.
663259	EE: In the "About Variable - Notes tab " window the A2L text is incorrectly rendered
668396	[NetWBID2365854120] SlimDX.Direct3D9.Direct3D9Exception: E_INVALIDARG: An invalid parameter was passed to the returning function (-2147024809)
669748	[WBID1120349757] (ExCLDTIndexOutOfRange) Index out of range.: 2
670187	Performance HW reinit. Note: Solved with HW init enhancements in INCA V7.4 SP2 and SP3.
671546	[WBID3334525453] IDispatch call returned an exception. ErrorCode: 0x80004005 Source: <unknown>.
672037	EE Recorder Dialog: Possible that Cursor position is not remembered
673955	EE Recorder Dialog: Possible that unexpected Cursor Position is remembered
674444	CDM Label viewer does not open automatically in column view
674758	[WBID838193719] UndefinedObject does not understand x
675082	[NetWBID3232977287] System.Data.StrongTypingException: The value for column 'Id' in table 'Recorder' is DBNull. Together with [WBID3896313398]
676017	Performance Open VSD
676056	Fail of creating zip log file with including 2-byte files
679925	CDM Muldticolumn: Preview with Editor/HTML does not work correctly
682522	Crash by opening tgtsvr.exe due to special char (Umlaut). Note: Solved with INCA V7.4.3.
682599	[WBID2607384943] Primitive failed in: Object>>#at: due to Index out of range in argument 1
683620	[WBID2846187194] UndefinedObject does not understand getTopVisibleRow:
683999	Not all message boxes pop up after permitting message boxes when INCA is opened with API but the property "DisplayMessageBoxes" is set to true
684155	Speedometer gauge: Division of 0 with 0, calculated value is NaN but [WBID1551315364] Primitive failed calling 'gdi32.dll':LineTo from PlatformFunction>>#callWith:with:with: due to Invalid class in argument 2
686258	[WBID3127426590] (ExCLDTIndexOutOfRange) Index out of range.: 2
687503	Window "Hardware status": Vertical alignment in "Device" column should be centered
687685	EE, XY Osci: Wrong displayed axis legend in case of hexadecimal/binary data after switching from phys to hexadecimal/binary data representation
688730	ODX Project data in Japanese mulibyte path was not recognized
688862	INCA/OTI_SOCK/IPv6: The configuration of a "Prefix" is required while it's not actually used. Note: Dont show or check anymore the IPv6 prefix GUI element.

689381	INCA ODX-LINK: DiagnosticServices window misses a scrollbar for request parameters in case parameters does not fit into the window
690151	[WBID4027558263] Primitive failed in: Object>>#at: due to Index out of range in argument 1
691910	EE: Not possible to get any other window on top when VSD is maximized opened for Calc Signals Editor
692779	[WBID4182820867] UndefinedObject does not understand sendMessage:wParam:lParam:
693065	MCE ILinkRT Backanimation is not working for virtual measurecal
695143	Successor for Internet Explorer for HTML report in CDM. INCA V7.4.4 will use the Windows default browser.
697850	COM-API ReadASAP2FileAndHexFile did not read UTF-8 BOM a2l
698234	After a softreset the ECU connection is sporadically not completely restored
699060	Exporting workspace with referenced VX config ini file does not work
699255	Critical exception by open HWC due to special char in name (Umlaut). Note: Solved with INCA V7.4.3
700279	EE, Osci: Suboptiomal icon and text size with zoom=250% in oscilloscope
700298	ASAP3 Bad translation in options menue - should be: "Vorauswahl von Geräten, Verstellgrößen und Messgrößen"
700299	ASAP3 Option is hardly readable
700379	INCA-CAN-Trace: Exception when stop measurment and F3.
700591	EE: Leaving ASCII Editor with Tab resets to old value
701348	Error Message during Copy&Paste: German version of message window not understandable because a part of it is missing
701356	ETAS License Manager: Autoborrow activation fails
701479	INCA Calc Signals changing order does not overtake highlighting of missing signals
701480	INCA Calc Signals are still marked as unnkown even if they are corrected
701500	INCA7.4.1 : Focus on parameter value after calibration has changed (In INCA 7.4.1 the Calibration Window has a different behavior)
701931	ETAS License Manager: The information provided in the offline migration in Etas License Manager is not correct
702067	ASAP3.exe changes DCOM Setting to "Interactive User"
702411	CDM Grid Editor: After Label double click in CDM List the Grid Editor and Label Viewer opens but only Grid Editor is expected
702473	BigData: Different connection behaviour depending on option setting, if HW was already initialized
702501	GETK: Calibration on working page does not work correctly on autosar single pointer projects in specific cases.
702608	Incorrect value is displayed (rounding error 4.5 E-16) but value correctly written in file.
702691	EE: Possible to get WB after try to open Properties from CombinedEditor in VUI: [WBID2747400907] String does not understand abs
703164	XCP_ON_FLX: If for the same FlexRay-Slot multiple send buffers (from multiple XCP slaves) for XCP commands are defined in the bus description file which are separated by a cycle repetition greater than one, the initialization will fail.
703426	Poor Performance of INCA at opening EE
703585	Clustered/grouped devices changes to RP if initialized unconnected
703727	ECU status of XCP Slave not correct
703857	HTML files missing in zipped log files archive if XCP on FlexRay was used

703910	IPETRONIK INCA Add-On with Mx-SENS2 4: Selecting signals in the VSD of a device with XCP A2L description fails, if all signals of an XCP Event are predefined in A2L (MIN_DAQ=MAX_DAQ).
704009	CEE from INTECRIO : Critical Exception from Target Server
704076	DB: Comments in INCA.sorted.INI missing
704132	CDM: Select second signal and press enter INCA crashes with [WBID2283141044] UndefinedObject does not understand do:
704471	CDM: Possible to Get PDF Error: The element 'SW-VALUES-CODED-HEX' has invalid child element 'VH'. List of possible elements expected: 'VF VT V VG SW-INSTANCE-REF' when try to make Compare All to PDF File
704485	INCA freeze when CSM Modules with ETH Addon is hanging (crashing). Error handling needed to avoid INCA freeze. INCA part fixed. CSM update needed.
704672	INCA User Option -> Hex-File, change entry in Intel or Motorola HexFileExtensions: [WBID3320955005] OrderedCollection does not understand substringsBySeparators:
704795	ETAS License Manager: FNE License Manager throws wrong warning for firewall port block leading to delays at customer getting resolution
704796	EE Offline Mode - visualization or recording can only be started if all device have been initialized. Note: Blocked the initalization of a single device in the offline mode with INCA V7.4.4 and higher
705345	Firmwar Check, open VSD and Click on Recorder: [NetWBID297345189] System.ArgumentException: RecorderController is not initialized + NetWBID297345189
705721	CDM: Changes made in CDM not shown (updated) in EE (CDM and EE parallel open)
705924	CDM WB when click on item: [WBID3183733732] RBStringType does not understand maxValue. Note: Solved with INCA V7.4.3
706073	CDM: Multiselect one label in horizontal direction does not disable Open Grid Editor
706099	HSP: ES581.4/INCA: Unquoted Service Path Enumeration. Note: Solved with HSP V13.4.0
706451	ServicePackInstaller: HF is not installed in downgrade screnario to V7.4 SP2.2 although SPI shows it was installed
706571	CDM: When changing size from lables in Comb Edior as Grid Esitor shows graphical part twice after changing the size manually
706686	HWI.DK includes afxres.h which belongs to MFC --> build fails without MFC. Note: Solved with HWI.DK V7.4.4
706781	CDM: Possible to get [WBID744951687] MCSDSMCalibrationController does not understand layerManager when try to edit computed Axis Points
706828	[NetWBID4123292461]INCA crash when DCM file added to Experiment includes special characters in its name and/or with name that is longer than 260 Char.
706850	EE: After changing User Option EE -> Index Aligment not any longer possible to select entries for Measure Array / Matrix
707013	FETK Signal are sporadically not measured. Recommendation: Use HW which supports the same or more measurments like used in Experiment.
707521	When opening Experiment via CDM, the not supported function "Initialize Device" caused system down / [WBID1492285174] MCSDummyCalibrationRecordingManager does not understand disconnectFromTSWithoutTS
707557	KVL: Possible that there is a gap in the numbering of the labels in the KVL after using Lab File
707596	EE: Content from Lab File is not the same when written in EE or written via VSD

707619	No data is shown in INCA EE from Ethernet Monitoring due to wrong start bit positons in the AUTOSAR file. Recommendation: The correct start bit positon (accoring sawtooth bit counting) should be used in the AUTOSAR file.
707820	Error handling when adding broken lab files from CDM
707829	No information is displayed when importing an empty Lab file into VSD
708138	Issues adding a lab file in VSD if the section SETTINGS is not at the first position in the lab file.
708252	[WBID2975944050] (ExEsAsyncScheduleTaskError) An exception has occurred: Can not schedule a task at system background priority, since submitPriority = (taskPriority - 1)
708273	CDM Multicolumn: Context menu is different between CDM Multicolumn and classical CDM view
708589	Errors are displayed when importing a lab file from KVL with comments containing spaces
708606	Parallel working Dialog is on top of all Windows - not only INCA ones
708738	INCA V7.4.2: Not possible to initialize the ECU with special settings for CAN-FD
708862	In message Window for measure file restoration text not completly visible
708945	EE: When scale for HDMI>100% possible that Customer Instruments have not the optimal size
708971	Workspace is newly created, rename deveice and press "configure" IPETRONIK Device: [WBID3011387521] UndefinedObject does not understand children
709029	Add a hardware to new DB if IPEmotion is already running: [WBID3394818400] UndefinedObject does not understand isInitialSetupDone
709157	Columns in CDM multicolumn view can be reordered (but should not)
709176	WB when a2l file assigned to the workspace: WBID3519561891_EtasDiagnosticServiceOnETHDevice class does not understand isPhysicalLayerDefinedInProject
709204	Open INCA EE crashes if user option "Enable Measurement of Calibrations" is set with [WBID1702516126] UndefinedObject does not understand includesSubstring
709276	Labels in the Lab file are written randomly every time after EE is reopened
709776	[WBID3421345940] UndefinedObject does not understand asDoubleArray. Note: Solved with INCA V7.4.0
710020	Warning "NO_COMPU_METHOD" is incorrect.
710026	Huge splitting cursor in VSD if zoom is set to 175%
710110	MemoryPageManagement-Dialog: Messagebox "Do you really want to create a copy of reference data..." does not appear within the ParallelWorkingDialog
710404	FlexRay monitoring meauserment starts delayed in INCA if extended loggin is switched ON. Recommendation: Switch extended logging OFF
710439	INCA freeze after start visualisation and Stop measuring with ETH Monitoring device inside
710491	Vulnerability Test failed (7zip, PERL, tar, gzip old versions installed). Note: Update to new versions: 7zip V22.01, PERL V5.36.0. tar and gzip replaced.
710494	iLinkRT V3: inconsistent Naming of Command 0x0205 RT_GET_DEVICE_STATE - INCA Logging has RT_GET_DEVICE_STATUS instead
710531	Vulnerability Test failed (7zip, PERL, tar, gzip old versions installed). Note: Update to new versions: 7zip V22.01, PERL V5.36.0. tar and gzip replaced.
710542	First time opening EE after import takes 10min, but it takes only 70sec at 2nd time in case 14.000 FLX-Monitoring signals with about 1200 Signal Groups.
710611	iLinkRT V3: RT3_GET_DAQ_MEASUREMENT_LIST returns unnown error 60034

710692	INCA-CANTransmit crash when automatically assign in Configure Output Channel dialog
710706	Selecting signals in the VSD of a device with XCP A2L description fails, if all signals of an XCP Event are predefined in A2L (MIN_DAQ=MAX_DAQ).
710979	Errors are displayed in the Monitor window when importing a lab file version 1.0 from KVL
711355	INCA crash when initialising Hardware [WBID390978459] IDispatch call returned an exception. ErrorCode: 0x80070057 Source: System.Xml. ' ', hexadecimal value 0x0B, is an invalid character.
711388	EE, Calculated Signals: After closing Def Calc Sig Editor not the former selected Calc Sig is selected
711449	CDM is not able to import a lab file from creta using the menu "add variable file" and "open variable file"
711649	UI issue: ASAP3 Setting text in German is too long and it not fitting to the form
712000	Replace system while measurement is running is not a valid use case, but EE has to be closed and measurement stopped.
712163	EE: odd graphical representation from Platform Osci when added into VUI
712285	VSD: VSD does not support highlighting of deeply nested VUIs
712599	ODX-LINK: OBD Vehicle Information data not sorted by ID when using multiple logical links
712812	CDM: For Scalar Editor Preview not the widget defined in User Options is used. Always Calibration Window is used.
713651	Memory leak in TgtSvr when performing VSD Rastercheck
713736	Manage Recorders Dialog: The grid cells are too small with zoom > 100%
713951	GDI objects increase after opening and closing HWC
714016	[WBID1037037829] (ExCLDTIndexOutOfRange) Index out of range.: 1
714143	1 x [NetWBID214978000] SlimDX.Direct3D9.Direct3D9Exception: D3DERR_WRONGTEXTUREFORMAT: Wrong texture format (-2005530600)
714708	INCA-VoiceRecorder: Close EE without saving: Sporadic [NetWBID1801112066] com.etas.inca.experiment.NoExperimentException: Eine Ausnahme vom Typ "com.etas.inca.experiment.NoExperimentException"
714866	Automated test: Sporadic crash after WP/RP switch and dataset changes.
715266	The Useroption Use Encoding when reading the ASAP2 file does not work.
715797	The Useroption Use Encoding when reading the ASAP2 file does not work (Part 2)
716061	Boolean type parameters cannot be added via ASAM MCD MC3 4 INCA with GET PARAMETER FROM AP-S commando if ASAP3 protocol version V3.0 is used. If you use V2.0 or V2.1, the error does not occur.
716194	Change the filename in INCA and during the saving process sporadic WB: [NetWBID1208651991] System.ObjectDisposedException: Cannot access a disposed object.
716566	INCA-VoiceRecorder: Start recording , wait at least 1 Min and then trigger the recording with F5 doesn't work for voice recorder
716792	INCA-CANTransmit cannot load .dbc file in INCA V7.3.x-V7.4.3
717002	eCDM Error reading CDF file from CRETA because sometimes it comes without extension (.ptp) - Error: No such file or directory
717101	After import of the created LAB-file into the EE not all exported labels are list in the VSD
717158	Vector_VN5610 : Initialization of XCPonUDP/TCP for Vector Device VN5610 is not happening after power cycle of ECU performed multiple times during measurement
717226	ASAP3_MeasureCal in Leading_All Raster cannot be added
717861	INCA Service Pack / HSP: Uninstallation/Installation HSP not possible in case Option „RemoveHSP_ServicePacks" is set to „true" and no HSP installed.

5.9   INCA V7.4.3

5.9.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended. With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.9.2   New Features and enhancements

- All news of the current INCA Service Pack see
  `INCA-V7.4-SP03-Whats-new.pdf`.
- Optimized Initialization of Devices connected to INCA
  - o Allow the initialization of a single device
  - o Allow the initialization of only those devices not yet in the connected state
    - New Menus in Hardware Configuration Editor
    - New Menus in Experiment Environment
    - Details see `INCA-V7.4-SP03-Whats-new.pdf`
  - o The following devices does not support the optimized initialization:
    - ES910.2
    - ES910.3
    - AS951
    - ES830
    - Daisychain Modules
    - XCP_ON_FLX
- Performance improvements:
  - o Two HW reinitializations needed for XCP measurement (HCP1).
    Note: Solved with HSP 13.3.0, part of INCA V7.4 SP3.
  - o #701559 Performance: Huge delay by opening Flash window from EE.
    Improved by approx. factor 10
  - o # 703428 Poor Performance of INCA in opening HWC.
    Opening HWC a 2nd time improved significantly.

5.9.3   Known issues of INCA V7.4.3 – Important Hints

- #703164 XCP_ON_FLX: If for the same FlexRay-Slot multiple send buffers (from multiple XCP slaves) for XCP commands are defined in the bus description file which are separated by a cycle repetition greater than one, the initialization will fail.

  Workaround: Use separate bus description files with only one send buffer (with arbitrary cycle repetition) per FlexRay-Slot.

  Affected versions: INCA V7.3.6 – V7.4.3. Solution planned with INCA V7.4.4

5.9.4 Known issues solved with INCA V7.4.3 – Important Hints

- #703295 INCA, XETK: Depending on the order in which both XETKs are switched on, the Master-Slave can be swapped.

  If more than one XETK are connected to INCA via Ethernet

    AND

  the XETKs have no fixed (static) IP - address

    AND

  XETKs are switched OFF (e.g., power off)

    AND

  XETKs are switched ON again

    THEN

  the XETKs might be exchanged. Correspondingly measurement and calibration are on the wrong XETK executed.

  This might lead to an error in case of different ECU projects, but might be not noticed in two bank ECU projects (grouped devices; master slave project)

  Affected INCA Versions: V7.4.0 up to V7.4.2

  Workaround:

  Use fixed (static) IP Addresses if possible (depending on use case; can be set with XCT /ETK Tools)

  or

  After reconnection, execute manually a reinitialization(F3) before restart measurement and calibration

  Note: Also solved with INCA V7.4.2 HF1.

- #699454 INCA ProF: TC49x + BR_XETK-S3.0C: Flashing of cached projects and initial flashing

  With INCA V7.4.2 the BR-XETK-S3.0C (TC49x) does currently not support ECU flashing of projects with cached flash access and it is not possible to flash a new controller (initial flashing, 1st time to program controller)
  Workaround: Flashing with debugger (also with XCP SW API) is working.

5.9.5 Bug Fixes and Improvements

- Notes:
  - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - EHI calls are listed in increasing order

EHI #	Title
551389	VSD: Added filter is unselected on reopeneing VSD
556296	EE_VSD Filter File: Filter is not automatically set after re-opening of VSD tab

567868	VTabBounds: in Customer Instruments different Inc/Dec steps possible
594616	[WBID168942109] + [WBID526537052] Fill-Method does not work for ARRAYs with verbal conversion
596075	Default comments on recorders are not working as expected
596349	Default comments are not present in Background recorders' measure file when 'Show Output File Properties' is unchecked
612523	INCA accepts A2L with double entries. User shall be informed with a warning: ASAP2Module/_default_ModuleName Element with same name already exists: "X" is renamed to: "X__m"
630890	DaisyChain: User asked to enter alias name event if it is clear that it won't work
650509	[NetWBID2871591417] System.ObjectDisposedException: Auf das verworfene Objekt kann nicht zugegriffen werden.
660273	Device Mapping Dialog maps wrong device if there are multiple same systems in the search result and the SFH is done more than once.
664943	[WBID1002085655] UndefinedObject does not understand config:
671936	[WBID3911227416] UndefinedObject does not understand dbInterface:
672379	iLinkRT V3 + ASAP3: No description available for CDM / ASAP3 settings for API Command EXECUTE_SERVICE ->Get / Set Option.
672857	[WBID1622020904] UndefinedObject does not understand replaceFrom:to:with:startingAt:
673342	[WBID3132509201] Primitive failed in: Object>>#at:put: due to Index out of range in argument 1
674137	EE: Copy Paste functionality for Calibration Window is not working from menu items in text fields.
675897	[NetWBID3067522103] UndefinedObject does not understand hide + [NetWBID3067522103]
678004	EE: Transformer does not work for x64
678247	EE: Possible that Measure File Name in not unique also when Counter is used
678549	DCM after adding variable in filename the cursor is not put on the end of the line
679927	CDM: Preview setting "bringToFront"does not work correctly
683773	Japanese OS: Unknown charactor code was gerated in DCM
684616	DB: During import from Export getting partly not needed and bad formatted entries in Monitor Log
684777	To prevent inconsistencies INCA checks when HWC is opened whether EE is already open. If so only a change of data sets is possible, but not of the ECU project (A2L).
685551	Experiment Oszi: Time axis 1h -> Display varies depending on the device
686773	EE: Osci is after save, close and reopen from EE not any longer visible when Border with default values is added
687209	EE: Not possible to type in "Path" into Recovered File Dialog (after a crash during recording)
687725	Two HW reinitializations needed for XCP measurement (HCP1). Note: Solved with HSP 13.3.0, part of INCA V7.4 SP3
689613	[WBID3608326790] (ExCLDTKeyNotFound) Key not found.
689643	Handling Output File Properties: Changes done for Default Recorder or Background Recorder are handled different in the EE
689987	ASAP3 documentation does not explain error message 60844
690461	EE: Possible to get File Name which is including the Counter not unique.
690647	Raster full dialog is not shown after reopen the experiment
690972	The Default Recorder was checked OFF when signal was moved from YT Oscillo to measure table

691926	hex(X1) in DEPENDENT_PARAMETER works only for parameters with numeric conversion
692251	EE: Open EE with KVL and the counter of variables works not correctly. Non-plausible max. counter is displayed in progress bar during loading experiment.
692793	CDM-MultiColumn: Error-Information in Destination cell initially not visible
693073	INCA-ODX-LINK: DSL file schema check does not detect unavailable signals in functional groups
694135	Print the error that is currently only visible in TgtSvr.log also in the INCA Monitor window: "Packet assignment not sufficient for initial CMD buffer (CMD has to be either FIXED or VARIABLE_INITIALIZED)"
694580	UDS Free Running Mode: Reinitialize automatically & download WP fails
694583	XCPonUDP: IP-Manager reassignement error message needs improvement. If the IP address is used by the server then it will report a clearer message that its used by the server.
694814	The edit field of Hex Editor should be disabled during recording in EE
695039	ASAP3 crashes when executes iLinkRTV3 Command "AddKeyValuePairToRecorderFile"
695096	Layer export doesn't display the layers designation name in the file name
695152	ODX project creation error. "Unzip failed" error is displayed.
695261	CDM: Cell of long ASCII value is not adapted to grid
696382	CDM Column view: Column width gets lost
696419	CDM Grid Editor: Headline shows not Display ID
696515	CDM: Possible that value in Label List is not updated for labels using same address
696523	CDM: New Workingpage Name is not updates in headline from Multi Column CDM
696526	EE: Reset to Ref Page does not work for CDM opened via EE for Labels in Combined Inline Editor
696913	CDM Grid Editor: Inconsistent properties for Calibration Window in Grid Editor
696917	CDM Grid Editor: Possible size from Scalar does not fit when before other label was opened
697134	UDS : time gap between two TesterPresent commands in UDS Freerunning mode is sometimes < 500ms
697296	Experiment: "Variable documentation" menu is not activated in the scope.
697301	CDM Grid Editor: Possibly opens Grid Editor on unexpected Monitor
697323	[WBID1374759582] UndefinedObject does not understand access - INCA crash if trying to open info-window for calculated signal
697420	CSM INCA AddOn Eth: Error message "No Error found" from Targetserver in INCA Monitoring Window
697454	CDM Grid Editor: Label Name is not complete visible for Scalar
697455	CDM GridE ditor: Not any longer possible to change Display Type for Scalar (but in User Options all Display Types are usable)
697566	During Test Bench Operation: [NetWBID1087685907] System.InvalidOperationException: Collection was modified; enumeration operation may not execute.
697734	EE: After Copy & Paste from Recorder the Default Comment is not correct copied
697737	EE: Background Recorder does not use expected Default Comment
697760	Measure Table and Measure Window show wrong values for Float 64 measurements
697761	ES910 (EIP-project): Data is shown as dummy data if ES910 project is opened offline

698311	EE: INCA might freeze and Memory reaches to ~100% when opens VSD to add Measured Signals while defining Calculated Signals
698370	CDM-MultiColumn: Additional column in CDM after destination and source are exchanged
698926	Sporadic Download Addressoriented without PrepareLoading -> causing exception in the A1B template
698974	CDM Grid Editor: Inline editor disappears and cell looses focus after value in Grid Editor has changed
699084	Wrong error message during import if drive does not exist
699330	INCA-SIP: Wrong signal mapping with filter
699369	New Init Window apperas double if HWC changes were made while EE opened
699388	CDM : Activating the change of an ASCII value in CDM from a destination is not possible with pressing ENTER on keyboard. With normal numeric it works as expected.
699454	INCA ProF: TC49x + BR_XETK-S3.0C: Flashing of cached projects and initial flashing. Note: See solved known issues for details
699717	INCA_Text "Wiederherstellen ausgewählter Dateien" not completly visible
699956	INCA Wrong timestamps when using trigger measurement with pre start trigger time when "Timestamp data type" option UINT32 is used but not REAL64. Note: Option UINT32 removed with INCA V7.4.3
700039	Rasters menu are not updating the raster fill after first switch of different INCA versions on the same DB (e.g. swith between V7.3 and V7.4). Note, does not occor if same INCA is opened a second time.
700075	CDM openes black
700157	Measurment configuration corrupted after disconnect. Note: Solved with HSP V13.3.0, part of INCA V7.4 SP3
700199	UDS: Measurement failure and tester present failure are not reported to user. An error shall be printed in the INCA monitor.
700282	Open EE with project with Common axis and VTabRange: [WBID3421345940] SmallInteger does not understand appliedInverseToNumber:
700362	HSP: ES582/ES581.4/ES584.1/INCA: Unquoted Service Path Enumeration. Note: Solved with HSP V13.3.0
700385	CDM Grid Editor: Size from widget is not adapted when change type to Slider for Scalar
700391	([WBID2044398667] EtasDialogShell does not understand mdiFrame) when changing type from Slider to Bit Editor for Scalar
700555	CDM Grid Editor: Possible that Grid Editor opens with too big size
700568	CDM Grid Editor: Ctrl-Del hotkey works unexpected for Grid Editor
701444	INCA crashes with Dump during API (EXAM) test: copyReferencePageToWorkingPage() when FETK is offline
701447	[NetWBID2299582725] System.Runtime.InteropServices.COMException: The server threw an exception. When switch between INCA Versions (e.g. V7.3 and 7.4) on the same DB. No issue when same INCA opened a second time.
701559	Performance: Huge delay by opening Flash window from EE. Improved by approx. factor 10
701564	HWC: Getting WB(WBID432159672] UndefinedObject does not understand keysAndValuesDo:) after read in A2L and Hex File when EE and HWC are opened together
701671	ODX: INCA shutdown after EE opening
701715	INCA-VoiceRecorder: Recording time for voice recorder 5 times shorter as configured
701756	Firmware update not successful if HSP has been started by INCA. Note: Solved with HSP V13.3.0 and INCA V7.4.3, part of INCA V7.4 SP3

702060	Drive Recorder Export, Import in INCA, Open EE, Init HW: [WBID2513484674] DEDataCuboid does not understand isPollingSignalGroup
702243	Format is not correct for DCM content depending on value (as '0xE' is read as exponential representation)
702245	Walkback in CDM Grid Editor when using arrow keys: WBID666545785 UndefinedObject does not understand updateHotkeyDisplay
702314	Calculated Signals: Name of missing signal is missing in the error message of calculated signal check
702332	[NetWBID2533310920] System.ArgumentOutOfRangeException: Value of '37' is not valid for 'Value'. 'Value' should be between 'minimum' and 'maximum'.
702374	INCA crashes with Dump during API (EXAM) test: Closing EE after finish test cycle. Note: Solved with INCA V7.3.7 HF1 and higher.
702494	INCA measuredevice of calc signals incorrect: INCA shall write into the field "Device" for calculated signals again "CalcDev" as in the past.
702495	CDM: Getting WB([WBID3339968429] MCSInstrumentDialog does not understand recreateMenuBar) after clicking Up Key in Grid Editor
702510	[NetWBID3546972234] System.ArgumentOutOfRangeException: Value of '85' is not valid for 'Value'. 'Value' should be between 'minimum' and 'maximum'.
702590	Create KVL generates incorrect sequence
702916	Crash (Callstack) when Initializing XETK listed in workspace that is not connected to the instrumentation. Note: Solved with INCA V7.4.2
703270	EE: Possible to get WB([WBID3334873823] MISSING 44 in krn) when try to open EE
703295	INCA, XETK: Depending on the order in which both XETKs are switched on, the Master-Slave can be swapped.
703428	Poor Performance of INCA in opening HWC. Opening HWC a 2nd time improved significantly.
703901	INCA-SIP: MDF Write functionality does not support timetables
704008	LAB File with wrong raster information
704792	ES910.3 (EIP-project): No variables in DCM export from EE
704969	CDM - Multi Column - Edit in Cells: Walkback [WBID1115110024] UndefinedObject does not understand height:
705345	Click on Recorder: [NetWBID297345189] System.ArgumentException: RecorderController is not initialized + NetWBID297345189
705919	CDM: INCA freezes by changing a calibration in CDM
706001	Rasters from LAB file are not set at experiment properly
706076	[WBID2000971040] (ExAssertionFailure) An exception has occurred: Assertion failed - OFFLINE without connected hardware // due to wrong A2L. Recommendatin: Fix the A2L
706570	CDM: Possible to get WB([WBID213071702] MCSInstrumentDialog does not understand isActiveChildMaximized) when try to edit computed Axis Points
706609	API: ResetValueToRP does not work with fixed curve and maps

5.10 INCA V7.4.2 HF1

5.10.1 Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended. With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.10.2 New Features and enhancements

- See INCA V7.4.2

5.10.3 Known issues of INCA V7.4.2 HF1 – Important Hints

- See INCA V7.4.2

5.10.4 Known issues solved with INCA V7.4.2 HF1 – Important Hints

See also INCA V7.4.2. In addition, this KIR issue solved:

- #703295 INCA, XETK: Depending on the order in which both XETKs are switched on, the Master-Slave can be swapped.

  If more than one XETK are connected to INCA via Ethernet

    AND

  the XETKs have no fixed (static) IP - address

    AND

  XETKs are switched OFF (e.g. power off)

    AND

  XETKs are switched ON again

    THEN

  the XETKs might be exchanged. Correspondingly measurement and calibration are on the wrong XETK executed.

  This might lead to an error in case of different ECU projects, but might be not noticed in two bank ECU projects (grouped devices; master slave project)

  Affected INCA Versions: V7.4.0 up to V7.4.2

  Workaround:

  Use fixed (static) IP Addresses if possible (depending on use case; can be set with XCT /ETK Tools)

  or

  After reconnection, execute manually a reinitialization(F3) before restart measurement and calibration

5.10.5 Bug Fixes and Improvements

- Notes:
  - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - EHI calls are listed in increasing order

EHI #	Title
703295	INCA, XETK: Depending on the order in which both XETKs are switched on, the Master-Slave can be swapped.
700282	Open EE with project with Common axis and VTabRange: [WBID3421345940] SmallInteger does not understand appliedInverseToNumber:

5.11   INCA V7.4.2

5.11.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended.
With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.11.2   New Features and enhancements

- All news of the current INCA Service Pack see
  `INCA-V7.4-SP02-Whats-new.pdf`.

Support of the new functionality *VLAN-Tagging* completed:

- XCP VLAN, IPv4/IPv6 tagged communication via ES886.2

  and

- XCP VLAN, IPv4/IPv6 tagged communication via Vector hardware

ETK Related Features

- Release of BR_XETK-S4.0B
- Release of BR_XETK-S3.0C
- Display the Device ID of the Default Device Selection for the HWC Device Selection
- Store and use device dependent HWC configuration parameters

Performance Enhancements

- #669891 Performance "Change workspace with huge AUTOSAR/FIBEX project" improved in both cases first time changing a project after the import and especially in case second and succeeding changing a project

  When changing an A2L project for a workspace that was just imported or after a new INCA version was installed, first the whole workspace has to be opened and updated by INCA in the background. These are the same actions as if opening the HWC of the workspace.

  When opening the HWC of a workspace the first time after the project has been imported or the first time after a new INCA version was installed, all referenced AUTOSAR/FIBEX projects have to be parsed and A2L files are generated. Parsing and A2L generation from AUTOSAR/FIBEX files takes a long time and is the main reason why opening a HWC and hence also changing a project takes so long initially. Changing a project a second time is much faster, but even then some contents of the AUTOSAR/FIBEX files used in the workspace had to be (re)parsed in previous INCA versions.

This has been improved with INCA 7.4.2:

1. First time changing a project of a workspace referencing AUTOSAR/FIBEX projects after import or after installation of a new INCA version has been improved by up to 30%

2. Second or succeeding changes of a project of a workspace referencing AUTOSAR/FIBEX projects has been improved by up to 60%.

(Improvement depends on the amount and size of the used AUTOSAR/FIBEX files.)

Note: Improved also

- #694729 Low Performance by change project (huge WS with special project)

- #676009 First time changing a dataset within a workspace takes long time

- #681515 Performance change DS on working page

- #676012 Open EE without HW-init

- #676031 AUTOSAR/FIBEX parsing: Performance "Open HWC without INIT" improved in both cases first time after the import and especially in case second and succeeding opening of HWC

When opening the Hardware Configuration (HWC) of a workspace the first time after the project has been imported or the first time after a new INCA version was installed, all referenced AUTOSAR/FIBEX projects have to be (re)parsed and A2L files are generated. Parsing and A2L generation from AUTOSAR/FIBEX files takes a long time and is the main reason why opening a HWC takes so long. Opening the same HWC again is much faster, but even then, some contents of the AUTOSAR/FIBEX files had to be (re)parsed in previous INCA versions.

This has been improved with INCA 7.4.2:

1. First time opening of a HWC referencing AUTOSAR/FIBEX projects after project import or after installation of a new INCA version has been improved by up to 30%

2. Second or succeeding opening of a HWC referencing AUTOSAR/FIBEX projects has been improved by up to 60%.

(Improvement depends on the amount and size of the used AUTOSAR/FIBEX files.)

5.11.3 Known issues of INCA V7.4.2 – Important Hints

- #699454 INCA ProF: TC49x + BR_XETK-S3.0C: Flashing of cached projects and initial flashing

With INCA V7.4.2 the BR-XETK-S3.0C (TC49x) does currently not support ECU flashing of projects with cached flash access

and it is not possible to flash a new controller (initial flashing, 1st time to program controller)

Workaround: Flashing with debugger (also with XCP SW API) is working.

5.11.4 Known issues solved with INCA V7.4.2 – Important Hints

Limitations of VLAN-Tagging with XCPonTCP with INCA V7.3.1 solved:

- #686891 XCPonTCP via VLAN re-connect after ecu power cycle not working if more than 1 ECU in use
- #687357 Vector Ethernet Network - Flashing fails if more than 1 XCPonTCP ECU in use
- #686894 XCPonTCP via VLAN: INCA crash when 3 ECUs power cycle during measurement
- #690222 Missing XCPonTCP packets in VLAN configuration with ES886.2 when additional Ethernet Traffic is on Network
- #687254 In case of **3** XCPonTCP at more than 0.25 Mbyte/s total via VLAN with ES886.2 losing connection when used with ETH-MON, SOME-IP-MON, XCPonCAN, MONonLIN

5.11.5 Bug Fixes and Improvements

- Notes:
  - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - EHI calls are listed in increasing order

EHI #	Title
532236	Maximized oscis not displayed correctly after reopen experiment
532391	VSD: Range value set in VSD display config is incorrectly displayed when checked in widget property
558873	VSD: Label disappears while doing cut and paste operation on the same widget
568088	CalibrationInterface: Possible that Context Menu Reset To Reference Page Value -> All Values does not work for Customer Instruments
572688	Inconsistent selection of variables when a filter is applied. Solution in 7.4.3.29: The selection gets reset after the filter is clicked and the first item in the list is highlighted.
583918	ODX: Recording is not working if the device serial number is not matching.
585972	INCA write an ERROR with communication in Monitor permanently, when XCP ECU is not connected
593931	HWC_Config: Assign the same CAN port to multiple CANs on one device
595608	Doing OptimizeWindowSize on Measure Window , Makes Active checkbox in Variable Configuration to Disable for Labels.
607278	CDM: Reset to reference Page Value-function confusing
607542	EE: Device Name is listed twice in VSD after changing Device Name with open EE
617690	INCA ASAP3 Wrong Error Message for Error 60223 if wrongly ASAP3 Protocol version 2.0 was used.
622218	[WBID252821250] UndefinedObject does not understand asSet
622813	Mouse Move Operation: [WBID1766740617]UndefinedObject does not understand undefineCursor
625996	[NetWBID3946126653] System.ObjectDisposedException: Auf das verworfene Objekt kann nicht zugegriffen werden.
647676	CDM: Cannot update (show) the TableLabelList widget in the MCSDSMTable for an added destination: [WBID3832133354] Primitive failed in: Object>>#at: due to Index out of range in argument 1;

658226	Combined Editor - 3D graphic widget: [WBID2281762909]UndefinedObject does not understand invoke:withArguments:returnType:
660712	INCA-SIP: Low performance issue when using small raster sizes
663285	Misleading recover message when during recording of mf4-file program was aborted
664704	INCA Service Pack Installer shall be able to install HSP
665832	ASAP3 commando does not reset all trigger conditions. The repetition is set to '0' by INCA when the trigger is switched to OFF (independent of ASAP3).
665974	EE: Variable is not updated after change Variable in Output Files Properties and pressing Write to User Options.
669639	API: GetRecordingPathName returns environment variable
669891	Performance "Change workspace with huge AUTOSAR/FIBEX project" improved in both cases first time changing a project after the import and especially in case second and succeeding changing a project
671930	[WBID2280054181] UndefinedObject does not understand mdiArrange
672569	iLinkRT V3: CONFIGURE MEASUREING: Problem if raster table is full
673934	INCA-VoiceRecorder: With the boolean signal as input for the trigger, the voice recorder comment is written only every second time
673998	[WBID1810002110] EtasExperimentEnvironmentWidget does not understand classList
674188	[WBID992464577] UndefinedObject does not understand isSGOHIContainer
674218	[NetWBID3485282044] System.ArithmeticException: Overflow or underflow in the arithmetic operation.
674374	Recorder Autoincrement wildcard location moving to first number in file name on its own after a few manual recordings
674668	Start Visualisation in HWC and open Experiment all variables are getting lost
674821	[WBID1439988983] UndefinedObject does not understand writeSingleShotValue:timeSource:
676009	First time changing a dataset within a workspace takes long time
676031	AUTOSAR/FIBEX parsing: Performance "Open HWC without INIT" improved in both cases first time after the import and especially in case second and succeeding opening of HWC
676236	A count CNTx at measure name is on unexpected position after end of the measurement
676349	[WBID2582403223] ASAP2DBProject does not understand pathString
676855	[WBID4139632485] UndefinedObject does not understand getDevice
677009	[WBID4253431924] EtasCalculatedSignalList does not understand updateDisplayIDForNode:atCS:input:diMapping:
677500	CDM: Possible getting Error Message is not specific enough from incorrect DCM File
677594	[WBID3004211623] CfsError does not understand isDir
677713	[WBID2292642907] UndefinedObject does not understand newTitleOfVUI:
678226	Wrong active workspace after INCA crash
679610	INCA-VoiceRecorder: No Trigger repead if start condition not "="
679914	[WBID1828434506] Exception in UI process + [WBID1320276615] FloatError does not understand transformedByInverse:
680165	EE: Possible that Measure Cals Label is not part of Recorded Measure File
680347	[WBID3005749569] UndefinedObject does not understand asap2
680646	[WBID570147687] process cannot be resumed
681156	CDM variables does not insert to correct position when strings is Japanese character
681344	[WBID4056942262] Primitive failed in: Object>>#at:put: due to Index out of range in argument 1

681515	Performance change DS on working page
682050	FETK Signal are not available after swich ignition - Part1
682153	FETK-T3.0A: Flashing with 7.2 or 7.3 does not always update the INCA Working Page
682229	FETK is not available after switch ignition - Part 2
682249	FETK/XETK Overload Error behavior does not update when user change Device Selection
683701	EE: About Box shows for Measure Label not expected entry Read Only = Yes
684664	ETK Tools: Selection of Acquisition control for raster in Raster Editor displays error
684904	Recorder Manager & Polling: Cannot delete multiple polling signals from recorder
685471	VSD information disappear after user select matrix/vector measurement variable
685531	EE: When clicking some entries in TriggerEditor Toolbox -> Logical not the expected function is added into Formula (BIT_OR clicked; BIT_XOR in written into Formula)
685941	eCDM and CRETA exchange for VAL_BLK type is not recognised.
686030	MDF Shell Extension V2.0.5: Old C++ Redistributable (2010) in MDF Shell extension installation
686564	CDM: Click with right mouse button does not change focus in new CDM view
686631	When VSD is opened from Key Variable List no variables are shown
686772	EE: Odd look fromcolor selector - the dialog is very much bigger than the area with any content when scale is 150%
686795	INCA-ODX: Polling measurement with ODX 2.2 projects does not work
686891	XCPonTCP via VLAN re-connect after ecu power cycle not working if more than 1 ECU in use
686894	XCPonTCP via VLAN: INCA crash when 3 ECUs power cycle during measurement
687254	3 XCPonTCP at more than 0.25 Mbyte/s total via VLAN with ES886.2 losing connection when used with ETH-MON, SOME-IP-MON, XCPonCAN, MONonLIN
687357	Vector Ethernet Network - Flashing fails if more than 1 XCPonTCP ECU in use
687512	Calibration of a Rescale Axis Pair in Complex Label is not updated in GUI widget
687547	[WBID3741793252] Character does not understand +
687630	CDM View does not retain the column width when dataset is changed
687766	ETK Tools: Generate Project Config file for FETK devices by Enabling "Use DISTAB in fixed mode"
688013	Targetserver error with INCA 7.4 for ETK
688446	[WBID808534493] (ExCLDTIndexOutOfRange) Index out of range. WB should be replaced with "error message" that corrupted dbc-file cannot be used
688670	INCA changes the name of measure file when you use rule with date with time and some characters are changed by saving before
688994	INCA-ODX: Wrong Language used for one entry in Diagnostic Services ConfigurationUI
689431	INCA-EIP: E-Target reference page value is changed to the same value of working page.
689542	Checksum calculation doesn't work as expected after Big Data User Options are set
689689	INCA-SIP: Executing MScripts.MDF.Write does not work properly.
689697	The CDFX generated by INTECRIO causes INCA to crash

690222	Missing XCPonTCP packets in VLAN configuration with ES886.2 when additional Ethernet Traffic is on Network
690645	Reading Autosar Files: [WBID852364851] Primitive failed in: BlockContextTemplate>>#value: due to Invalid argument count in receiver
690762	INCAfreezes while the measurement due to issue with two LIN Monitoring
690936	Tgtsvr.exe crashes on attempt to flash ECU
691025	[WBID852547681] UndefinedObject does not understand asFloatArray
691052	EE, Output File Properties Dialog: Possibly missing indication that File Name and Path is too long
691056	CDM - API , EE || CDM operations: [WBID1091457534] MCSOnlineExperimentFrameWindow does not understand source:
691182	CDM||EE: View in EE not updated if variable is calibrated within MultiColumnView. Classical CDM view not affected. Workaround change to RP and WP to update view.
691637	Possibly getting for more than 1 minute empty information window when try to read A2l, cod, cdfx file
691876	Cannot set 100000 baud rate for VN1630 with reciever type "high speed"
691902	[WBID2529184497] UndefinedObject does not understand isZAxis
691942	CAN-FD CAN-Monitoring with ETAS HW (with used low Transmission rate and Data transmission rate) isn't possible.
692227	Editor still shows WP values for ETarget on RP
692394	MDF4: INCA 7.4.1 - Incorrect documentation of measure Channels. Order of devices mixed. LIN-files not documented.
692809	Target sever callstack issue by opening HWC. Recommendation: Reinstall INCA.
692852	Walkback in INCA after closing CDM after copy action to not usable/writable path [WBID1551479858] CfsError does not understand writeOn:
693030	OBDonUDS: different behavior compared to OBDonCAN if no ECU found
693039	INCA freeses because of background Recorder
693286	EE Recording doesn't start with MDF 3.x in case it uses huge number of calibration recording signals (here >9000) and no normal measurement signals in the recorder
694729	Low Performance by change project (huge WS with special project)
696050	[NetWBID2664619404] Arction.Wpf.Charting.ChartException: Something caused the rendering engine to reinitialize.: Unhandled error on frame drawing causing engine reinitialization:
696161	[NetWBID3689447834] Arction.Wpf.Charting.ChartException: Something caused the rendering engine to reinitialize.: Unhandled error on frame drawing causing engine reinitialization: HRESULT: [0x8899000C]
696355	INCA-Touch: Delays in INCA-Touch Window visualization on 11. generation Intel PCs with Intel-Iris-XE graphic card sporadically lead to INCA crash - NetWBID3446189853, NetWBID3761807217 or NetWBID2664619404
696839	ETAS Time Synchronisation with ES600.2
697198	CDM: Not possible to work with previewer in Internet Explorer 11 due to low performance
697687	Durting Test Bench Operation: [WBID2273692218] UndefinedObject does not understand isManaged
698236	INCA-VoiceRecorder: INCA freezes with second WS
698818	ETAS License Manager: INCA V7.4 cannot be started if LiMa is in oflline mode in case licenses borrowed with autoborrow mode

5.12   INCA V7.4.1

5.12.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended. With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.12.2   New Features and enhancements

- All news of the current INCA Service Pack see
  `INCA-V7.4-SP01-Whats-new.pdf`.

Support of the new functionality *VLAN-Tagging*:

- XCP VLAN, IPv4/IPv6 tagged communication via ES886.2

  and

- XCP VLAN, IPv4/IPv6 tagged communication via Vector hardware
- Note: Requires HSP V13.0.1 or HSP V13.1.0
- XCPonTCP support is currently limited to one ECU with known issues – see section known issues for details.

5.12.3   Known issues of INCA V7.4.1 – Important Hints

Current limitations of VLAN-Tagging with XCPonTCP:

- #687357 Vector Ethernet Network - Flashing fails if more than 1 XCPonTCP ECU in use
- #686891 XCPonTCP via VLAN re-connect after ecu power cycle not working if more than 1 ECU in use
- #686894 XCPonTCP via VLAN: INCA crash when 3 ECUs power cycle during measurement
- #687254 In case of **3** XCPonTCP at more than 0.25 Mbyte/s total via VLAN with ES886.2 losing connection when used with ETH-MON, SOME-IP-MON, XCPonCAN, MONonLIN
- #690222 Missing XCPonTCP packets in VLAN configuration with ES886.2 when additional Ethernet Traffic is on Network

5.12.4   Known issues solved with INCA V7.4.1 – Important Hints

- #686013 Calculated Signal of type LookupTable is wrongly calculated

  IF
  a calculated signal is used
  AND
  the calculated signal is created by the LookupGenerator.bat
  AND
  the used axis of the lookup table has a descending order

THEN

the result values can be wrong.

Note: The issue was introduced with Perl V5.30.0 included in INCA V7.3.0. It is no issue with Perl V5.8.6 in INCA V7.2.17 and former versions.

Affected INCA Versions: V7.3.0 - V7.3.7 HF3

Workaround: Do not use calculated signals with lookup tables with axis in descending order

Solved with INCA V7.4.1 and INCA V7.3.7 HF4

- #682704 CAN Monitoring and FlexRay Monitoring time stamp might be wrong. Wrong offset is added.
  IF
CAN Monitoring or FlexRay Monitoring are used for measurement together with other measurement devices
  AND
all measurement hardware devices are not powered on directly before the measurement
  THEN
Time Stamps of random measurement devices can be wrong by n times 4000 Seconds due to an issue with time counter overflow handling.

  Affected: INCA V7.3.7, V7.3.7 HF1, V7.3.7 HF2
  Workaround: Switch HW Devices OFF-ON to reset the time counter.
  Solved with INCA V7.4.0 and INCA V7.3.7 HF3

- #677784 EE: Remove Axis Points does not work.
  If a Axis point in removed on the Working Page (with context menu X Axis -> Remove X Axis Point) it looks like the Axis Point is removed.
  But after switch to Reverence Page and back to Working Page, the Axis Point is still there.
  Affected INCA Versions: INCA 7.3.x

5.12.5   Bug Fixes and Improvements

- Notes:
  - Some issues are solved with the corresponding INCA – Add-Ons, which are part of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - EHI calls are listed in increasing order

EHI #	Title
550227	VSD Open raster preselection not greyed out in data source tree
590857	[NetWBID1303746876] System.AggregateException: One or more errors occurred.
614624	[NetWBID1054053220] System.InvalidOperationException: Die Sammlung wurde geändert.
614946	[NetWBID3814451588] System.InvalidOperationException: Collection was modified; enumeration operation may not execute.
622870	[WBID3531912978] UndefinedObject does not understand isEmpty
628818	[WBID843609804] UndefinedObject does not understand axisPtsRef

632302	Performance CDM: Time taken for CDM actions like Compare all, List all and Copy increased in INCA V7.3 compared to V7.2
632428	Trigger Editor: The cursor shifts left if a variable is added via the context menu (right mouse). Then the variable is added in the operator and the formula is not valid.
633224	Calculated Signals: Captions have changed for many calcsig related dialog boxes.
633426	Calculated Signals: Copy and Paste of the Calculated Signals should be successful
650235	[WBID768724685] & [WBID1053240374] UndefinedObject does not understand isMeasurement
650905	Pixel of YT osci values in the area of the max axis value are cut and the cursor value tooltip text too
650936	CDM Option function->"flat function view" and "defined and referenced calibrations": [WBID2781213648](ExCLDTIndexOutOfRange) Index out of range.: 1
652304	CDM creates unnecessary *.dtd-file while listing cdfx-files
652474	[WBID306560295]RBLayoutConfiguration does not understand redrawNCArea
655535	CDM: [WBID3373206914] UndefinedObject does not understand menuDisplayFilterCHARACTERISTICValblk
656275	[WBID3635914168] UndefinedObject does not understand errorCounter
656383	Hint in the CDM options if change of parameters is not possible in "options" dialogue: 'Please change settings directly in CDM GUI.'
656431	INCA Rightclick in trigger definition moves cursor to the left
656872	[WBID1176021134] UndefinedObject does not understand getValidModule
657302	INCA change position of osci signal stripe changes given bachgroundcolor to default
657948	INCA Some/IP Monitoring isn´t initialising Hardware
658071	CDM: WBID806359137]UndefinedObject does not understand assignProject:
658969	INCA wrong display of experiment elements after changing Windows display scaling
659396	[WBID3896026000] Primitive failed in: Object>>#at: due to Index out of range in argument 1 + [WBID2518683706]
663230	Rendering artifacts in VSD with scale > 100% and large fonts
663627	CDM: [WBID2266937037] String does not understand createForItem:dataset:dbController:editMode:
663952	Remove Oscilloscope Version (V7.1)
664681	EE: List with possible Variables in File Name is not any longer visible after wrong char is removed
665050	[WBID742451634] process cannot be resumed
665144	[NetWBID3025948061] System.ArgumentException: Timestamps do not fit pixel offset from previous calls.
666067	Optimzed Column Size gets lost when EE is saved in laptop monitor and opened again in other monitor or reopend after saving
666590	[WBID4127031264] Primitive failed in: Object>>#at: due to Index out of range in argument 1
666907	[WBID306560295] UndefinedObject does not understand removeCallback:receiver:selector:clientData:
667462	[WBID1789553639] UndefinedObject does not understand selectCells
667560	[WBID3701411435] UndefinedObject does not understand closeWorkbase + [WBID1276305124] Exception in UI process
667648	IPM ES8xx: Automatic IP reassignment in case of IP of one device in different subnet does not work

668171	EE: Recording is not starting only visualization in case MDF Type 4.0 and Path (+File Name) is too big
668204	[WBID1014707617] String does not understand showUnit
668672	[WBID989514713] Primitive failed in: Object>>#at: due to Index out of range in argument 1
670189	Performance HW -reinit after FW check
670796	EE Performance improvement "Close EE"
671162	AUTOSAR : limits of linear CompuMethod (CompuScale) seem to be ignored
671393	[WBID3720025746] UndefinedObject does not understand isDataEnumeration
671943	EE: Crtl-A does not work in VSD if during this action Progress Bar is active
671954	INCA Measure Tabel opens with scrollbar while save and close experiment with 100% Display Zoom and open it with 125%
672039	Raster selection menu from variable configuration menu fails to open
672216	EE: After remove Variables from Path to avoid too long Path recording is not any longer possible
672368	EE: Possible to Close Recorder Configuration with OK and using not valid Path.
672377	iLink3: The following commands are not described in the manual: COPY DATA EXCHANGE FILE TO DEVICE / SELECT DEVICE SET
672792	Performance EE: Close an experiment without saving improved by factor appr. 5
672971	EE: The _ in File Name Preview is not visible for 175% zoom
672979	CDM button "change source and target" active but doesn't work without selected target
673909	COM-API usecase (INCA-FLOW) in combination with LERT wrapper device: [WBID3359399871] EtasDynamicEmuRAMV1CalibrationMethodWrapper does not understand availableSignalGroups
673993	LIN: Exception Callstack:>>>VCRUNTIME140.dll!0x00007ff92d1cc8d8>>>a1b_LinMon.dll!0x00007ff8e651dd94...
674029	AUTOSAR_ISO8859-1 : value 38d with Iso88591TextTable shows problem in YT Oscilloscope
674217	Copy layer brings unnecessary and wrong Info screen
674243	INCA delete Layer dialog comes without translation
674879	UDSonCAN in ProF - Functional Address and send Flow Control in Physical Address. Solution: New CNF Parameter FUNCTIONAL_CAN_ID and new UDS command PASS_THROUGH_FUNCTIONAL. Details see What's New INCA V7.4 SP1
675124	[WBID185423556] ASAP2Measurement does not understand logWarning:
675474	[WBID2579530524] Primitive failed in: Object>>#at:put: due to Value out of range in argument 2
675567	[WBID2553441747] UndefinedObject does not understand existsMeasureDataInDictFor:
675666	Rendering issues in HDPI with 250%
675707	ES89x: New CAN FD data rates (800000Baud/3200000Baud)
676006	Performance adding a new project files (A2l + HEX). Improved appr. 10%
676019	Performance EE: Close EE without saving. Note: Improved by factor 3-6.
676087	INCA option "Bytes to Write in HEX file" does not work as expected (a lot of fill bytes for defined memory segments are added)
676171	[WBID861494825] UndefinedObject does not understand isMeasurement
676325	EE: 3D Matrix unexpected selectable in VSD
676339	[WBID1129861953] UndefinedObject does not understand <
677279	ProF flow fails with some installation paths
677784	EE: Remove Axis Points does not work.

678157	CDM Variables CALIBRATION_ACCESS not identical. Note: This function is not supported: Compare test and result removed for Calibration Access with INCA V7.4.1 and higher.
678217	XCP on CAN -> ECU not connected -> INCA can no longer be operated after 4-5min (no response)
678550	INCA shows unreadable message cyclic
678655	Change name for folder in INCA Database with setname via api command does not work correctly
678795	Recording Big Data-named recorded WP and RP dataset in the recorded mf4 file with same name saved
678920	EE: Possible that Undo (Remove X Axis Point) does not reset to old values
678930	XCP on UDP/TCP sends SYNCH commands with not increased counter
679085	[NetWBID719241462] System.ArgumentOutOfRangeException: Index was out of range. Must be non-negative and less than the size of the collection.
679179	EE: INCA crashes when some layers were copied from another experiment into actual experiment with [WBID1476238073] UndefinedObject does not understand title
679227	ETAS License Manager: LIMA pops up a strange error message when you try to activate a FNP license
679530	Callstack error when using INCA V7.3.6 measurement and T32
679784	[NetWBID2299582725] System.Runtime.InteropServices.COMException: The server threw an exception. (Exception from HRESULT: 0x80010105 (RPC_E_SERVERFAULT))
679934	INCA crashes at start of EE: [WBID306560295] UndefinedObject does not understand height
679944	IPM: Handling invalid default offset configuration
679949	ES820: Array type signals from Ethernet Monitoring missing in ES820 measure file, if the name of the measure array contains a square bracket after a dot (xxx.[yyy).
679959	[WBID3846528122] (ExCPMStackOverflow) A stack overflow has occurred.
679992	*.ee64 file can be added to an empty experiment - but in the ready one all the variables are ignored (2 FETKs with different names in HW config)
680075	ES820_7.4.0.63 INCA might hang sporadic after ES583 disconnection while running measurement
680305	CDM: Not needed warnings in the INCA Monitor concerning CALIBRATION_ACCESS and READ_ONLY
680416	Deleting variables on Manage Recorders failed without error message
680588	CDM from Experiment Environment can not compare slewing variables
680894	EE: Possible that Undo does not work for Output Values after removing Axis Point
680896	INCA crashes when starting/stopping the visualization (callstack: incaprot.dll!0x00007ffcde596691)
681103	If COMPU_METHOD of Axis differs to COMPU_METHOD input variable, then process point is correly disabled but WB at variable information check - [WBID59590611] Primitive failed in: String>>#at: due to Index out of range in argument 1
681104	Strange behavior opening a HWC containing FLX without an assigned project from an older INCA Version
681295	First ProF config installation: The selected folder must not contain the "Prof" directory. A non empty 'prof'-folder is a not allowed ProF-destination name, but should be.
681353	XCPonETH VLAN TAGGING: Flashing not possible with normal Logging (connection error)
681368	[WBID161294879] UndefinedObject does not understand hwItemInstanceID

681667	DB: After import possibly unexpected elements are expanded in DB Browser
681880	Wrong message when Experiment is opend
682295	EE: WB([WBID4107769322] Primitive failed in: SmallInteger>>#primitiveQuo: due to Divide by zero) after closing VSD when there was an element from a Measure Array selected where the size is too big
682704	CAN Monitoring and FlexRay Monitoring time stamp might be wrong. Wrong offset is added.
682753	iLinkRT (ASAP3) window crashes with dump after RT3_READ_CHARACTERISTIC for an Array with VTAB axis
682755	iLinkRT V3.0: Error on RT3_READ_CHARACTERISTIC - "the command can't be executed because the index used to access the data is out of range"
682780	VX Config : "2 Folder Comment" window does not contain initial file name - general problem - also for AUTOSAR, ...
683228	Record a measure variable with "status string flag" STATUS_STRING_REF - MDA shows a warning
683261	Reduced a2l cannot be used due to hooked variable
683605	INCA ODX-LINK for WWH-OBD pdx file in asian language. OBDonCAN_ETAS_SAEJ1979_2021-04 special units.pdx and WWH_OBD_ETAS_SAEJ1979_2021-04 special units.pdx updated.
683705	DB: Possible getting unexpected Error Message when Open EE after Copy and Paste EE Element in DB Browser
683731	ASAP3 Lock Window is opened to often
683858	FETK_Upload if ACC fails: User guidance is missleading
683980	INCA-CANTransmit stops sending CAN Frame when Acquisition system stops recording
684178	Dependent Parameters are not calculated
684302	ASAP3: No value(s) sent if the signal(s) configured via ASAP3 in two rasters. INCA accepts the multiple raster and records it. But ASAP3 is no longer able to read the multiple raster from INCA. GET_ONLINE_VALUE throws an error.
684779	ETAS License Manager: Online Migration Staus window without text if no Acitvation ID is selected for migration
685013	ODX-LINK: OBD projects miss a global negative response handling
685129	ODX-LINK: Parameters with PhysicalType FLOAT and precision 0 get printed with 4 decimal places instead of 0
685356	ProF Dialog: Drop Down shall support scrolling, in case the number of values exceeds the screens height.
685436	VLAN: Unset DEI flag in OTI_SOCK CreateNetworkInterface calls
685933	Unplausible Timestamps with approx 430 000s. Note: In the INCA.ini the user option "timeDataType" is set wrongly to uint32: timeDataType=#uint32
686013	Calculated Signal of type LookupTable is wrongly calculated
686277	FIBEX Converter (FlexRay Controller Converter) crashes if pMicroPerCycle is 0
686404	iLinkRT: Wrong Measurement Identifier
686621	INCA V7.4 Lookupgenerator.bat has wrong path to perl.exe (points to V7.3 installation)
686667	INCA add Project to Database increasing between 7.3.7 and 7.4.1
686753	ETAS License Manager: Manual Proxy Mode returned "Sending message failed"
687637	ODX-LINK: WWH-OBD service command ReadDataBY_ITID protocol identification (0x22 F8 10) did not work.
690235	Input or change IP Address setting on MCE, iLink-RT does not work correctly

5.13   INCA V7.4.0

5.13.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.4 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is recommended. With the MSI-installation technology it is more important not to change any files manually otherwise uninstallation or new installation (update) will very likely fail.

5.13.2   New Features and enhancements

- All news of the current INCA Service Pack see `INCA-V7.4 Whats-new.pdf`.

5.13.3   Known issues of INCA V7.4.0 – Important Hints

- XETK & ETK Tools: TC27xED_A microcontroller no longer supported with XETK.

  Micro Controller Support: Removed support of TC27xED_A of XETK in HSP V13.0.0, INCA V7.4.0 and ETK Tools V4.3.0.
  In order to support the TC27xED_A, install and use INCA V7.3.7 and ETK Tool V4.2.7.

- #677784 EE: Remove Axis Points does not work.
  If a Axis point in removed on the Working Page (with context menu X Axis -> Remove X Axis Point) it looks like the Axis Point is removed.
  But after switch to Reverence Page and back to Working Page, the Axis Point is still there.
  Affected INCA Versions: INCA 7.3.x

5.13.4   Known issues solved with INCA V7.4.0 – Important Hints

- #682704 CAN Monitoring and FlexRay Monitoring time stamp might be wrong. Wrong offset is added.
    IF
  CAN Monitoring or FlexRay Monitoring are used for measurement together with other measurement devices
    AND
  all measurement hardware devices are not powered on directly before the measurement
    THEN
  Time Stamps of random measurement devices can be wrong by n times 4000 Seconds due to an issue with time counter overflow handling.

  Affected: INCA V7.3.7, V7.3.7 HF1, V7.3.7 HF2
  Workaround: Switch HW Devices OFF-ON to reset the time counter.
  Solved with INCA V7.4.0 and INCA V7.3.7 HF3

- #679946 ASAP3 Get Online Value not working for variables with Multi Raster.
    IF
  using ASAP3 with INCA V7.3.6
    AND

the experiment contains already measurements selected in multiple raster
   AND
the ASAP3 client configures a measuring list by
PARAMETER_FOR_VALUE_ACQUISITION containing such multiple raster
measurements
   AND
the client requests measured values by GET_ONLINE_VALUE
   THEN
ASAP3 may send wrong measurement values to the ASAP3 client

Note: The measurement values recorded by INCA are correct.

Affected INCA Versions: INCA V7.3.7 and V7.3.7 HF1.
Solved with INCA V7.3.7 HF2 and INCA V7.4.0

- #675782 Open EE of INCA V7.4.0 is slower than with former INCA versions if an
  .EXP file from former INCA versions is imported into INCA V7.4.
  This is due to an important bug fix to avoid inconsistencies.
  With INCA V7.4.0 this is improved (even faster than before). This means, for new
  EXP files created/exported with INCA V7.4.0 and higher and reimported to INCA
  V7.4 the issue is improved.
  Recommendation: To improve performance of EXP files of former INCA versions, it
  is recommended to import them to INCA V7.4.0 and create/export new .EXP files.

- #673876 Calculated Signal was not exported in multi-byte path. No error message
  shown.
  If a "2Byte Character Operating Systems" is used, e.g., Japanese, Chinese, Korean,
  etc.
     AND
  a Calculated Signal is exported to a multi-byte path, e.g. "C:\日本語"
     Then
  the Calculated Signal (XCP file) will NOT be exported to this path. There is also no
  error message shown.
  Affected INCA Versions: INCA V7.3.0 to V7.3.7.
  Workaround: Select a path without 2byte Characters, e.g. C:\MyCalcSignals\ for
  export of the Calculated Signals.
  Note: Solved with INCA V7.3.7 HF1 and V7.4.0.

- #673394 INCA-EIP: SetProject API creating addition empty dataset if A2l is imported
  along with CDFX file
  Information for scripting with INCA-EIP:
  The commands
    masterDataSet = a2l.GetMasterDataSet()
    ret = Device.SetProjectAndDataSet(a2l, masterDataSet)
  needs to used if a CDFX dataset shall be used as master dataset.

5.13.5   Bug Fixes and Improvements

- Notes:
  - Some issues are solved with the corresponding INCA – Add-Ons, which are part
    of the INCA Service Pack (SP) or solved in combination with the current HSP.
  - EHI calls are listed in increasing order

EHI #	Title
562253	COMAPI: IncaTool.WriteMonitorToLogFile(fileLog) writes file to unexpected location if pathname does not end with \
603583	CDM - Running a list or compare action using FileConv plugin does not write Input Quantities to the .listxml file
609953	Moving the display areas in the ASAP Editor results in a compressed table area
619327	CDM_CombinedEditor: Missing "h" for Scalar-values when selecting hex-view
626816	[WBID236776011] UndefinedObject does not understand axisPtsRef
635879	[WBID2479755885] UndefinedObject does not understand isPhysRepresentationAccurateEnough
642082	EE: Recording is not starting after some actions in Manage Recorders
644381	INCA transport layer window is not readable
648826	[NetWBID4271190914]System.ObjectDisposedException: Cannot access a disposed object.
649127	Description for Option Standard Index should contain hint that it is recommended for MDA8
649660	[WBID79443218] UndefinedObject does not understand isVariableDocumentationPossible
650647	Cannot use hotkey ALT + Z in embedded editor in CDM when 3D and table is used with German language because output folder will be opened.
651550	Crash at "Properties" in YT-Osci during running measurement: [NetWBID2319331352] System.InvalidOperationException: Variable 'INCA_date_stnd\CalcDev' not found in device 'CalcDev'
652032	INCA incorrectly calculates the number of bytes required for group Axis
652053	Open CDM: [WBID3139240058]String does not understand createForItem:dataset:dbController:
654466	EE: Matrix is handled differently depending on the way of selection
657444	EE: Context and Main Menu are in different state for Platform Osci and using Cope/Move Variable to Window
659892	[WBID2700048958] UndefinedObject does not understand axisPtsRef
660984	[NetWBID579188588] System.NullReferenceException: Der Objektverweis wurde nicht auf eine Objektinstanz festgelegt + [NetWBID3275414319] System.NullReferenceException: Der Objektverweis wurde nicht auf eine Objektinstanz festgelegt.
662234	ES850 : Help for ES850 is not available in INCA Help menu
662727	EE: Activation from Background Recorder only with Keys not possible
663640	Service Pack Installer: Installation of INCA 7.3 fails with exception.
663689	[WBID1014936805] UndefinedObject does not understand counter
663809	[WBID4238656195] UndefinedObject does not understand isPhysRepresentationAccurateEnough
663864	Service Pack Installer: Sporadical reboot detection issues where the SP crashes/disappears
665787	Export of the calibration scenario from INCA V7.2.17 does not work in INCA V7.3.5
666096	INCA MDA: INCA is updating snapshot event to MDF files only on opening MDA from EE with UI actions.
666609	INCA adding senseless Rater Information to MDF-file (-fmx0 mv0)
667337	Online Help (F1): Missing help content for "Utilities Menu"
667741	Export of the INCA workspace without reference elements contains wrongly the ldf file from LIN-Monitoring
668388	VSD Name Filter incompatibilies of INCA components

Template: 00TE00156 V07 – released

668834	Performance : Time taken to Stop Measurement After enabling Recorders in Manage Recorder decreased
669569	XCP RasterCheck : VSD RasterCheck shows different views (bars)
669754	Autosar2Asap2: Converter can't handle Compu Scales in formulas with no upper and lower limit
669888	For CSM-Signals no device info available in MDF4 file
670203	ETAS License Manager: Delay by INCA start because of BORROW
670208	CDM Config in DB-View does not update Source/Destination Comment when Source is changed
670433	ASAP3 / COM-API: Grouped Devices -> Arrays are not adjusted in both devices
670532	Network Manager Company LAN default button subnet inconsistencies
670730	AUTOSAR_I-SIGNAL Array : INCA crash on right click at I-SIGNAL Array elements in VSD - NetWBID579188588
670921	Applying a filter does not allow to expand the last function in the list
670931	Unable to use same A2L file as 7.2, Out of Memory Error -assign the A2L to an XETK.
671132	AUTOSAR_ISO8859-1 : value 38d and 39d show problems in Iso88591TextTable
671607	Replace System for Vector Ethernet Network does not work correctly <maxNumber>unlimited</maxNumber>
671656	INCA V7.3.5 and V7.3.6 crash when using XCP-on-CAN in place of XETK
671924	[WBID969847516] UndefinedObject does not understand asUInt32Array
671968	MDF file is deffect due to issue with writing functions and groups, opening MDF files with FUNCTIONs and GROUPs.
672039	Raster selection menu from variable configuration menu fails to open
672043	Optimized Export for Driverecorder leads to no more usable project file. Note: Sovled with INCA V7.3.7 but in case the A2L-file has to be read again before triggering the optimized export again.
672190	Calculated Signals: Name of missing signal is missing in the error message of calculated signal check
672294	[NetWBID1087685907] System.InvalidOperationException: Die Sammlung wurde geändert. Der Enumerationsvorgang kann möglicherweise nicht ausgeführt werden.
672325	iLinkRT: SELECT DEVICE: two ECUs receive the same device ID
672362	[WBID4003691798] UndefinedObject does not understand asFloatArray together with [WBID612512492] Exception in UI process
672367	API: Get Option / Get Option Information: Different spelling for "Behavior" in the same command!
672397	[WBID3479449393] UndefinedObject does not understand asSInt16Array + [WBID2541959444] Exception in UI process
672436	INCA V7.3.7: Replace System for Virtual System for DoIP under ethernet is not working
672529	DBC files with Lf instead CrLf do not work in INCA
672545	XCP_ON_FLX: Assignment of buffers for DAQ does not work as expected
672568	Performance issue part 7: Performance issue by select variables in polling raster
672650	INCA-EIP: Sporadic crashes of Target ethernet Server during running automation Test
672707	Saftety Advice difficult to find. Change NLS source string Product Disclaimer to Safety Advice.
672716	Uplug ETH-cable to E-Target device leads to [WBID1318666715] receiver must be a boolean
672742	ILinkRT V3 -> ASAP3.exe window crashes if RT3 WRITE CELL VALUES uses 65535 as max index

672790	[WBID4081832971] SmallInteger does not understand compareDoubleScaled: when reading a2l file with errors.
672869	INCA crashes when simulated ECU is powered down and the communication via Kvaser Virtual CAN with [WBID969847516] UndefinedObject does not understand asUInt32Array
673010	C++ Redistributable in INCA installation removed (vs_redist_2010)
673019	CDM Creating PDF takes a long time
673021	Import offset out of rangeImport offset out of range ...import aborted.
673139	Big Data : INCA does not remove unused files before preparing MDF attachement of actual project files
673181	[WBID59447360] (ExCLDTIndexOutOfRange) Index out of range.: 1
673258	arxml: Conversion -> Keyword <CATEGORY> missing -> no warning or error when parsing in INCA
673288	Long Scenario name not visible in the experiment drop down
673394	INCA-EIP: SetProject API creating addition empty dataset if A2l is imported along with CDFX file
673562	COM-API: Command axis.SetDoublePhysValue (GroupedDevices datatype Maps): [WBID2024164496] Vector does not understand asRowArray
673733	Recorder Configuration Dialog: Japanese error messages for incorrect use of variables for path and file name are not user friendly.
673876	Calculated Signal was not exported in multi-byte path. No error message shown.
673923	EE: When click on item and VUI used with list (EtasScrolledListGO): [WBID606119544] EtasIconList does not understand showToggle
674287	Movement of Calibration Window Splitbar to the Right doesn't work as expected.
674471	[NetWBID155931239] VisuIT.ASAP2.Parser.Asap2ParserException: Error in the application. A2PARSER_E_REQUESTED_DATA_INVALID
674631	INCA V7.2/V7.3 DB, EXP exchange: [WBID1021327665] (ExCLDTIndexOutOfRange) Index out of range.: 1
674759	[WBID3421345940] UndefinedObject does not understand title
674849	ETK Tools: Creating of a XCT configuration from an A2L file and project configuration file failed if not all emulation handles are needed to cover the DATA segments.
674901	COM-API: MeasureCal variables used by name *.output cannot be part of a COM-API trigger condition
674950	ETK Tools: Calculated overlay configuration contians unneccesary handles, other are missing instead. Solved: Only memory segments of the type DATA are now covered, even if they are mixed with CODE segments.
674993	iLinkRT_V3: RT3 GET DAQ MEASURE LIST -> Data type information swapped
675000	ETAS License Manager: LiMa shows successful activation, although the communication to server not persisted
675081	[WBID1122515093] (ExCLDTIndexOutOfRange) Index out of range.: 1
675452	[WBID852364851] Primitive failed in: BlockContextTemplate>>#value: due to Invalid argument count in receiver
675561	INCA DB V7.3 Not enough capacity for current object error 32770/32771: Recommendation: Convert one time the DB to a "INCA 7 x64 database"
675782	Open EE of INCA V7.4.0 is slower than with former INCA versions if an .EXP file from former INCA versions is imported into INCA V7.4.
676005	ETAS License Manager: Performance getting license at Starting INCA
676029	Performance: Update empty EE after selection in VSD
676069	The first right klick on the dataset starts TgtSv but doesn't open context menu.
676255	Kistler KI-Box XCP error: Using a different time Resolution for GET_DAQ_CLOCK and XCP Slave Clock is not supported. Note: Workaround

	to support the incorrect and correct unit type (60 or 06) with INCA V7.2 is no longer supported with INCA V7.3.
676342	DCM file cannot be loaded where comments are not declared properly
676508	INCA does not re-configure DAQs when changing raster of Measurement Variables
676574	CDM: Output-file is written into wrong directory after switch view (CDM Multicolumn)
676835	ComAPI: WB during executing an automation script [WBID617425689] receiver must be a boolean. Note: Now error message occurs due to exceeded boundaries
677013	RP-HW requires that INCA provide a new error message under certain circumstances for model download: The Error code is 167 and the message should read: "Model download prohibited. The target device is not the stack master device. Please use the web in..."
677319	INCA-VoiceRecorder: No sounds files reordered by second trigger for the same measurement.
677608	INCA V7.3.7: VN7640 INCA supports wrong CAN_FD baudrates.
677690	Targetserver crash on testbench using Vector Hardware and POD. Recommendation: IPM not installed properly. Please reinstall.
678037	[WBID2537269082] UndefinedObject does not understand getPalette in combination of Software Bundle with ECU-Tests , Labcar Operator and RTPC V 6.5.2
678298	No data visible in INCA when INCA-MCE activated. Recommendation: It is necessary to open the ports of the windows firewall used by the ES910 for both directions, IN and OUT.
678663	INCA-SIP: MDF Write occasionally hangs if attempting to write to a locked file
679747	XETK V1.0: Checksum calculation is not working as expected when HW is initialized (affected only old use cases w/o PATTERN_REFRESH_TIMEOUT)
679937	ETK Tools: A2L parser from XCT tool violates the the A2L standard were is allowed to use points for identifier for memory segments
679946	ASAP3 Get Online Value not working for variables with Multi Raster
680687	INCA-CANTransmit: CTX_dbc2A2lCnvrt.exe writes the file CheckCANType in the program directory
681338	ODX-LINK: [WBID993528549] EtasOdxCreateProjectCmd does not understand errorMessage: if DTS is not available / installed. Solution: Error message in case DServer (DTS) is not installed correctly.

6   Contact, Support and Problem Reporting

For details of your local sales office as well as your local technical support team and product hotlines, take a look at the ETAS website:

ETAS subsidiaries	WWW:	www.etas.com/en/contact.php
ETAS technical support	WWW:	www.etas.com/en/hotlines.php