INCA V7.3.7 HF4 – 64Bit

Release Notes

Release: May 2022

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Contents

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1 Introduction

Dear customer, in this file you will find the latest information about our product INCA V7.3.

IT IS NECESSARY TO UPDATE ALL FIRMWARE USING HSP V12 PRIOR TO USING INCA V7.3 WITH HARDWARE

(Note: With each INCA Refresh, Service Pack the corresponding HSP V12.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.

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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 7.3 → Manuals and Tutorial.**

2 Product Definition

2.1 Functions at a glance

New functionality of INCA V7.3 is listed in the overview "INCA-V7.3-Whats-new.PDF".

You find the overview "INCA-V7.3-Whats-new.PDF" on the installation DVD in the folder "Documentation" 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.

2.2.2 System Prerequisites

The following minimum system prerequisites have to be met:

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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® 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-V7.3-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

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| 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_V7.3_InstallGuide_EN.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

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- 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 V7.3 introduces a new version of the target server component.

For this reason, with INCA V7.3 and former versions of the ETAS Experiment Environment (not release for operation with INCA 7.3) simultaneous online operation will not be possible. E.g., if during bypass operation, INCA V7.3 is used to measure and to calibrate on an ECU, the Experiment Environment not released for operation with INCA 7.3, 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 V7.3.

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 amount 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 V7.3 installation** first. The Hardware Service Pack (**HSP V12.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_V7.3_InstallGuide_xx.PDF**, Chapter "Installing the Program".

2.4.1 Important Installation Hints

- **Very important:** After the installation a reboot of the computer system is required.
- MDA V8 is now shipped with the INCA 7.3 DVD and installed automatically with the INCA 7.3 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

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The Hardware Service Pack (HSP) V12 is also included on the installation DVD.

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 V7.3

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

2.5.1   ES4xx (Daisy-Chain) and ES6xx Support
INCA V7.3 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

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2.5.2 ES5xx, ES8xx and ES9xx Support
INCA V7.3 supports the following modules. No further Add-on installation is required:

	CAN	CAN-FD	LIN	FLX	ETH[1]	ETK	FETK
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]		
ES886	X	X	X		X		
ES891	X	X	X	X			X
ES892	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	

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2.5.3   3rd Party Support

INCA V7.3 supports a number of 3rd party bus interface devices. No further Addon installation is required. The operation of these devices with ETAS software must be enabled. The enable bits 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
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		
VN5610(A)	X	X			X
VN5640(A)	X	X			X
VN7600	X			X	
VN7610	X	X		X	
VN8910(A)					
VN8950[2]	X		X		
VN8970[2]	X	X	X	X	

(1)   Automotive Ethernet

(2)   piggies for VN8910(A)

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).

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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-V7.3-Whats-new.pdf.

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 V7.3 64-bit data base.

Due to change to a 64-bit data base, former INCA versions cannot use the INCA V7.3 data base directly. Exchange is possible via the export and import option of INCA V7.3 and INCA V7.2. More details might be found in the INCA-V7.3-Introduction.pdf.

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 V7.3.0, valid for all INCA 7.3.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 V7.3 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 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 #426483	Starting measurement with unconnected XCP on Ethernet takes a lot of time. Note: this is a standard behavior of Ethernet communication. Not solvable in INCA. Workaround: Open the EE in offline mode ("Experiment without full HW-access"). No change planned.
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.
Solved with INCA V7.3.3.

EHI #NA	J2534 support with INCA V7.3.

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 #649691	INCA V7.3.0 - MDF 4: INCA does not write the "vehicle name" in the measurement file as specified in the "Recording Save Dialog", but instead incorrectly writes the project name. Affected INCA Version: INCA V7.3.0 to V7.3.2
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.

3.4.2   Hardware related Items

Problem Number	Title
NA	NA

4   Hints

4.1   Compatibility with other INCA versions

- INCA V7.3 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 V7.3
    - Projects created in former INCA 7.2 versions 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 V7.3 64-bit data base.
    - Due to change to a 64-bit data base, former INCA versions cannot use the INCA V7.3 data base directly. Exchange is possible via the export and import option of INCA V7.3 and INCA V7.2.
    - For better performance, it is recommended to exchange 64-bit export files (*.EXP64) with INCA V7.3, 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).
      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 previous INCA versions..
    - Further details might be found in the INCA-V7.3-Introduction.pdf (root of Service Pack folder and in the \Documentation\WhatsNew folder).

5 Version History, Refresh and Hotfix Information

The INCA 7.3 Service Packs (SP) updates (or downgrades) a former INCA 7.3 installation automatically, in case INCA V7.3 is already installed. The INCA V7.3 base installation and INCA Add-On installations will be updated with help of the INCA Service Pack.

If INCA V7.3 is not installed, it is highly recommended to install immediately the latest INCA V7.3 SP (there is no installation of INCA V7.3.0 or another former INCA version required).

Important: The automatic update requires a corresponding INCA V7.3 installation (but it is also possible to install an INCA V7.3 SP without a previous installation of INCA V7.3)

An INCA 7.2 installation has to be updated manually to INCA 7.3 (like a new installation).

All refresh software updates (shipped with INCA 7.3 Service Packs) are cumulative. The most recent refresh incorporates any changes introduced by previous refreshes.

The following issues have been fixed with INCA V7.3. History is listed in reverse order.

5.1 INCA V7.3.7 HF4

5.1.1 Recommended Installation

See INCA V7.3.7

5.1.2 New Features and enhancements

See INCA V7.3.7

5.1.3 Known issues of INCA V7.3.7 HF4 – Important Hints

See INCA V7.3.7

5.1.4 Known issues solved with INCA V7.3.7 HF4 – Important Hints

See INCA V7.3.7, V7.3.7HF1, V7.3.7HF2, and V7.3.7HF3. Additionally, these known issues solved:

- #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

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

- #686026 INCA V7.3.7HF3: Uninstallation of INCA V7.3.7 HF3 fails

  A) After uninstallation of INCA V7.3.7 HF3 the remaining former INCA V7.3.7 installation (INCA V7.3.7, V7.3.7HF1, or V7.3.7HF2) is no longer working.

  B) After installation of INCA V7.3.7 HF3 it is not possible to uninstall INCA V7.3.7 immediately.

  Workaround: Execute a repair of the remaining INCA V7.3.7 installation (INCA V7.3.7, V7.3.7HF1, or V7.3.7HF2). Then the remaining INCA V7.3.7 is working again or it is possible to uninstall INCA V7.3.7.

  Affected INCA Version: INCA V7.3.7 HF3.

  Note: Due to KIR issues it is not recommended to use INCA V7.3.7 to INCA V7.3.7 HF3.

  Solved with INCA V7.3.7 HF4. During installation of INCA V7.3.7 HF4 the INCA V7.3.7 HF3 (and former INCA V7.3.7 hotfix installations) will be uninstalled and the installation repaired.

5.1.5 Bug Fixes and Improvements

See INCA V7.3.7, V7.3.7HF1, V7.3.7HF2, and V7.3.7HF3. Additionally, this issue solved:

EHI #	Title
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.
686013	Calculated Signal of type LookupTable is wrongly calculated
686026	INCA V7.3.7HF3: Uninstallation of INCA V7.3.7 HF3 fails

5.2 INCA V7.3.7 HF3

5.2.1 Recommended Installation

See INCA V7.3.7

5.2.2 New Features and enhancements

See INCA V7.3.7

5.2.3 Known issues of INCA V7.3.7 HF3 – Important Hints

See INCA V7.3.7

5.2.4 Known issues solved with INCA V7.3.7 HF3 – Important Hints

See INCA V7.3.7, V7.3.7HF1, and V7.3.7HF2. Additionally, this known issue solved:

- #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.

5.2.5 Bug Fixes and Improvements

See INCA V7.3.7, V7.3.7HF1, and V7.3.7HF2. Additionally, this issue solved:

EHI #	Title
682704	CAN Monitoring and FlexRay Monitoring time stamp might be wrong. Wrong offset is added.

5.3 INCA V7.3.7 HF2

5.3.1 Recommended Installation

See INCA V7.3.7

5.3.2 New Features and enhancements

See INCA V7.3.7

5.3.3 Known issues of INCA V7.3.7 HF2 – Important Hints

See INCA V7.3.7

5.3.4 Known issues solved with INCA V7.3.7 HF2 – Important Hints

See INCA V7.3.7 and INCA V7.3.7 HF1, additionally this known issue solved:

- #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.

5.3.5 Bug Fixes and Improvements

See INCA V7.3.7 and V7.3.7HF1, additionally this issue solved:

EHI #	Title
676835	[WBID617425689] receiver must be a boolean
678037	[WBID2537269082] UndefinedObject does not understand getPalette in combination of Software Bundle with ECU-Tests , Labcar Operator and RTPC V 6.5.2
678572	[WBID1941687619] UndefinedObject does not understand setTextColor. [Sporadic]
678821	WB in CDM after using Control + I hotkey on a specfici variable [WBID2592742658] Primitive failed in: String>>#at: due to Index out of range in argument 1
679946	ASAP3 Get Online Value not working for variables with Multi Raster

5.4 INCA V7.3.7 HF1

5.4.1 Recommended Installation

See INCA V7.3.7

5.4.2 New Features and enhancements

See INCA V7.3.7

5.4.3 Known issues of INCA V7.3.7 HF1 – Important Hints

See INCA V7.3.7.

5.4.4   Known issues solved with INCA V7.3.7 HF1 – Important Hints

See INCA V7.3.7, additionally this known issue solved:

- #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.

5.4.5   Bug Fixes and Improvements

See INCA V7.3.7, additionally this issue solved:

EHI #	Title
673876	Calculated Signal was not exported in multi-byte path. No error message shown.

5.5   INCA V7.3.7

5.5.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (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-V7.3 SP7 Whats-new.pdf.

5.5.3   Known issues of INCA V7.3.7 – Important Hints

- #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.

5.5.4   Known issues solved with INCA V7.3.7 – Important Hints

- #671134 Working database objects corrupted after database repair
  IF
  an Asian OS is used (two byte Char OS, e.g. Japanese, Chinese, Korean, ...)
  AND
  database objects which contain strings are edited or newly created
  or a database repair is executed
  THEN
  these objects are handled and saved incorrectly.
  The result is that these database objects are no longer usable.

  Affected INCA Version: V7.3.6 (only)

- #672726 Wrong Port number in INCA V7.2 imported from export file which exported by INCA V7.3
  and duplicate
  # 671071 Backward compatibility of INCA not given - Port number of CAN-Nodes are changed after import
  Use Case: Importing an exp64-file which has been exported with INCA V7.3.5 or V7.3.6.
  HWCs created with INCA V7.3.5 and V7.3.6 are storing additional attributes which leads to the problem that the port for some of the CAN-Nodes are set to CAN1, even though in INCA V7.3.5 or V7.3.6 they were exported with other nodes.
  If a HWC is newly created with INCA V7.3.7 the problem is solved and will not occur anymore.
  If a HWC is created with INCA V7.3.5 or V7.3.6 the problem is already in the configuration. Changing the port once to another port and changing it back again with INCA V7.3.7 will correct it in the stored configuration.

- #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
  INCA supports only the old "Channel-based mode(legacy)"

- #668332 IPManager default offset start and end addresses from InstallationDefaultSettings.xml are not applied during installation.
  The InstallationDefaultSettings.xml parameters
  - IPM_DEFAULT_OFFSET_START
  - IPM_DEFAULT_OFFSET_END
  were not applied for the IPManager Network Settings configuration during an INCA installation. The IPManager used internal defaults instead.
  This has been fixed with INCA V7.3.7.
  The two parameters are persisted in the registry when applied during an INCA installation. Subsequent INCA installations will also apply these default settings, even if the parameters are not used in future InstallationDefaultSettings.xml files.

Deleting the default offset definitions is not possible, only overwriting with different values in InstallationDefaultSettings.xml.

- #666217 Automatically calculated MEMEORY_SEGMENTs include also MEASUREMENTs.
  - This issue is solved with INCA V7.3.6 only for the use case if the option "Calibration of Measurements" is deactivated.
  - But the "Calibration of Measurements" - Option shall not be activated in case of an A2L without a MEMORY_SEGMENT. This will not work!
  Note: Finally solved with INCA V7.3.7

- #664132 HWC: OffsetCompensation fails in HWC after the raster rate is changed within the experiment environment (EE).

- # 668375 INCA 7.3 export does not work with INCA V7.2 due to invalid font used in VUIs of INCA V7.3.0 to V7.3.2
  Affected: Exports from INCA V7.3.0 - V7.3.2 to INCA V7.2 are not working if VUIs are used with fonts, which are no longer available on the target computer.
  The issue is solved with INCA V7.3.3.
  Workaround for affected Exports:
  - Open experiment in INCA V7.3.3 and save it.
  - Then export it for INCA7 database. This export then works for 7.2 without errors.

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
450256	EE CSE: Message box missing for new scenario activation when copied from another scenario.
551480	[NetWBID3396986151] System.AggregateException: Mindestens ein Fehler ist aufgetreten.
582199	INCA Inst-Int SDK: ValueChanged Event is not called by Working Page change
597366	INCA minimized windows are placed in another location when another Layer has scroll bars
601585	Signal Name is hidden with "Change Widget To" of Measure Table
603276	COM-API documentation: GetOption / SetOption were extended, however description refers to SP3 as implemented INCA Version
613297	EE: Rescale Axis Pairs Variables accepts values which violates Monotony in Input
615360	[WBID2502741402]Primitive failed in: Object>>#at: due to Index out of range in argument 1
618739	Different behaviour when deleting calibration variables from calibration window (only some are deleted, but not all selected)
618788	ASAP3 Lock window is not working after reinitialisation of ECU
618876	More GDI-objects needed after Windows 10 1809 update. Note: Improved with INCA V7.3.7, less GDI-ojects for calibrations and better performance
625427	ServicePackInstaller: Support of empty Engineering/Custom Add-On Folder for additional Engineering - Add-Ons

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626247	[WBID446255601] Primitive failed in: Object>>#at: due to Index out of range in argument 1
630790	No Measurement on VN1640 CAN Port, after connecting other VN-Hardware to the PC
631738	INCA does not support VN5610 and VN5640 with new driver mode "network-based mode". Note: See section "known issues solved with INCA V7.3.7"
632668	Performance DB: Read A2L and Hex is slower by 20% in INCA V7.3.0 compared to V7.2.16
635877	Replace System with ECU devices below the ETH node and SomeIP not working correctly
636120	Extend Safety Advice by Arabic language
640780	Replace System for XCP devices below the ETH node is not working
644414	[WBID1451216939] receiver must be a boolean
650043	INCA: Column ‚Raster' is not visible in KeyVariableList
650719	XCPonFLX : Initialization of two XCPonFLX devices (NAX 2 and NAX 5) often fails and measurement is interrupted
651752	[WBID720189516] UndefinedObject does not understand getActionKeys
652032	INCA incorrectly calculates the number of bytes required for group Axis
653643	CDM path settings "Abbrechen" not completly visibel
654133	ETAS License Manager: Notation ACT-ID differ in different dialog windows
654352	Changes to window positions with key combination "Ctrl + Tab" are not applied in the experiment
655987	S19 file is not completely written
656199	CCP SUSPENDEDMODE WrongSession ID: Inca records values directly after CCP Cold Start for Experiment with wrong Session ID
656795	When functions are added to the Key Variable list via VSD, all variables in a function are added with the the Display option "RecordingOnly" same is expected when function is added via labfile
657561	EE: If using Use Context Menu X-Axis -> Edit for Referenced Axis, it possibly looks like that nothing happens
658894	MAX_EVENT_CHANNEL not reflected in VSD for XCP1.0
659687	ES820: Removing the external SSD disk without using the media release button shall not destabilize ES820.
660323	CDM Multi Column: Inline Compare view does not disappear when selecting several labels with CTRL-key
661646	EE: Possibly INCA opens Table Editor in EE but should open Combined Editor
662607	CDM parallel EE: Wrong Button-Text when starting copy action ("%1 all", "%1 highlighted")
662866	ES415_using formula "Non Interpolation tabel" the physical value in the yt-oscilloscope displayed incorrect. Note: Solved, but it might be needed to change something in the formula to correct it and calculate with the corrected formula.
662926	Open EE, open VSD with given project: [NetWBID1971169032] System.InvalidOperationException: Element 'HEGO_flgS2B1Prsnt_C\FETK:1' with ID ID681519947 not found in input XML for VSD
663154	EE: Possibly getting not needed Scrollbar for Z Axes in Cuboids
663301	Big Data : Write description file does not consider include structure correct.
663942	EE: Possible that Context Menu Edit does not work for Axis
664132	HWC: OffsetCompensation fails in HWC after the raster rate is changed within the experiment environment (EE)
664666	[WBID3918700420] UndefinedObject does not understand isComboBoxPoppedDown

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664717	File Name, Date Time: Getting file name which ends with AA in case of multiple usage of File Name like messung_&[MM]-&[dd]-&[yyyy] &[HH]_&[mm]_&[ss] and not ending with counter
664786	Filename, DateTime: Getting Counter and not needed _AA as ending for Measure File Names
664856	Replace System for XCP devices below the ETH and CAN Monitoring generates an extra XCP node
664990	INCA VN8910 with VN8970 connected via USB can not find CAN Monitoring
665000	[WBID3089002604] UndefinedObject does not understand do:
665052	INCA-SIP: Cannot Measure DLL Variables from INCA (sporadically)
665276	Arrays are not supported in VSD for ETH-Monitoring
665294	CDM changing view caused system error [WBID1517281708] UndefinedObject does not understand workingDataKey
665346	DB: For "Clear Phys Unit" in Tab Axis Description Undo does not work
665375	Filename, Date Time: Possible to get String in User Option with not allowd charcaters which leads to unexpected File Name
665538	Replacing of device names leads to invalid calculation methods (solved with INCA V7.3.6). Improved with INCA V7.3.7: If device names are not valid, such signals are greyed out.
665539	Trigger definition invalid, after remapping of device names
665601	In Asap2Editor, Calibration access changes for any axis should always be reflected in values tab.
665733	VSD : Open of existing EE fails in case of many inactive signals
665774	[WBID1609458005] UndefinedObject does not understand isSelected:
666180	File Name, Date Time: INCA works different if old or new Variable is used User Option
666190	File Name, DateTime: Possible that File Name uses no Variable
666488	[WBID814372861] UndefinedObject does not understand isECUTargetDevice
666492	VCan SearchForHardware: After disconnecting a real Vector Device, VCan is not found in SearchForHardware Dialog anymore
666898	ES85x Configuration Tool: Multi-select doesn't work
666922	[WBID2140199755] UndefinedObject does not understand getDevices
667043	Recorder configuration : variable &[PROGRAMDESCRIPTION] is not resolved in preview when &[PROJECT] variable used in file name of recorder configuration.
667256	Cannot load DCM file via API as source file in CDM when path is longer than 256 characters - with INCA manually it works. Note: New error message which says that the path+file is too long.
667414	INCA writes unexactly meta informations in the mf4 file when raster is 1 MHZ and maximum of decimals is 6 for min / max of raster info--> errorneous visalization in TurbLab
667422	API AutosarFolder.RemoveAutosarFileDescriptions Method => [WBID1785981738] UndefinedObject does not understand getContainedItemsByNames:
667458	INCA crashes on ARXML Import with special characters
667465	ES820 SP V7.3.6 Stack: Shutdown to FBS through PSCI Pin is throwing error. Sovled with ES820 SP V7.3.7
667484	File Name, Date Time: Unclear behaviour when New Variable are part of old Variable
667630	EE: Unexpected entry in Raster Selection Dialog (of not existing rate) from widget in case of Measure Cals
667674	LowPassFilter function does not accept values between 0 and 1 if language is switched to German on English OS computer

668167	ETAS License Manager: FNE license was shown in online/offline Migration dialog
668168	TrgtSvr Crash closing INCA due to ETK TestDevice
668303	INCA V7.3 does not recognize wrong project assignment and crashes with at experiment opening with [WBID306560295] UndefinedObject does not understand device
668323	Paste Table function of Verbal Conversion Table does not work properly
668332	IPManager default offset start and end addresses from InstallationDefaultSettings.xml are not applied during installation. Note: See also section "known issues solved with INCA V77.3.7"
668334	Network manager does not allow to pre configure the NIC to be used
668337	XETK-Configuration Message for XETK but FETK used
668375	INCA 7.3 export does not work with INCA V7.2 due to invalid font used in VUIs of INCA V7.3.0 to V7.3.2. See also recommendation and workaround in section "solved known issues".
668377	Network Manager opens on no more connected screen
668378	ES8xx: Target Server does not work any more sporadically
668881	Missing translation for Recorder Configuration window
669037	Automatically calculated MEMORY_SEGMENTs include also MEASUREMENTs - use case "Calibration of Measurements" - Option activated in case of an A2L without a MEMORY_SEGMENT. See also known issues solved with V7.3.7.
669263	Recorder Configuration: A few descriptions were not translated to Japanse
669308	ES850: Unexpected sampling rate switching behavior in ES850 Config Tool
669485	Copy & paste of calculated signals is not possible in INCA 7.3.x
669528	WB open CDM and GDI objects are running low. [WBID1790269454] UndefinedObject does not understand items. Solved and hint displayed how to reduce resources.
669565	Arrow for selected ECU im MultiECU pane is shown for unselected ECU
669567	Pin icon is only partially showing in multi ecu pane
669678	XCPonCAN communication Crash with a specific *.a2l
669795	CDM Switch View: [WBID1517281708] UndefinedObject does not understand workingDataKey
670057	ES 820 SP V7.3.6: Function XmlGetConfiguration() for the OutputFileCollection returns wrong SchemaNamespaceURI. Note: Solved with ES 820 SP V7.3.7
670078	ES85x Configuration Tool: Copy multiple fields between two ES850 devices in INCA is not possible
670106	Missing refresh after activating a data set in multi column view
670207	INCA crashes when changing database [WBID557478623] Primitive failed in: String>>#at: due to Index out of range in argument 1
670225	ASAP3: XCPonCan -> Checksum Error blocking ASAP3
670245	[WBID2400874408] UndefinedObject does not understand apiType , Occurs while importing lab file in KVL.
670433	ASAP3 / COM-API: Grouped Devices -> Arrays are not adjusted in both devices
670676	Exception when the variable contains invalid characters for OS path
670931	Unable to use same A2L file as 7.2, Out of Memory Error -assign the A2L to an XETK.
671000	After repair of database some experiments are not visible in database, one is deleted and the other are not visible
671071	Backward compatibility of INCA not given - Port number of CAN-Nodes are changed after import. Note: For details see "Known issues solved with INCA V7.3.7"
671103	INCA shows Database loading error even the Database is almost blank.

671134	Working dataset corrupted after database repair
671694	Add a description of $variables to the INCA online help
671887	Variables for measurement filename are not self-evident. Note: Documentaion updated.
671888	API Documentation outdated of QuickStart_Enable method
671931	ES85x Configuration Tool: Error when copying 'Cutoff Frequency' or 'Filter Type' to target cell where value is not avialable in combo box
672040	Parameters for calculated signal LowpassFilter cannot be configured correctly
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.
672126	INCA-VoiceRecorder starts only once
672190	Calculated Signals: Name of missing signal is missing in the error message of calculated signal check
672192	Calculated Signals: Correction of a typo in calculated signals does not work
672265	INCA Trgtsvr crash sometimes after start and stop measure
672325	iLinkRT: SELECT DEVICE: two ECUs receive the same device ID
672364	EE: Possible to get not expected path after saving Output File Properties
672482	COM-API: [WBID874305064] RBTwoDCharTable does not understand setImplValue: -> oCalibrationV.SetImplValue(Value) (grouped Devices)
672483	COM-API: [WBID1075258813] RBOneDCharTable does not understand getXSize -> oCalibrationV.SetDoublePhysValue(Value) (grouped Devices)
672535	COM-API: [WBID4186811460] DEDataCuboid does not understand updateValuesTo: -> oCalibration.SetDoublePhysValue(Value) CUBOID grouped Devices
672712	INCA AddOn ENG-Video 7.3.x: LIMA configuration failed while install AddOn_ENG-Video 7.3.x
672726	Wrong Port number in INCA V7.2 imported from export file which exported by INCA V7.3. Note: For details see "Known issues solved with INCA V7.3.7"
672742	ILinkRT V3 -> ASAP3.exe window crashes if RT3 WRITE CELL VALUES uses 65535 as max index
673010	C++ Redistributable in INCA installation removed (vs_redist_2010)
673181	[WBID59447360] (ExCLDTIndexOutOfRange) Index out of range.: 1
673239	[WBID306560295] ReadWriteStream does not understand skipBackwardsTo: - INCA crash when mapping will be done at start of experiment
673780	Project exports from INCA V7.3.4 to INCA V7.3.6 HF2 are not compatible in INCA V7.2.17 [NetWBID155931239] VisuIT.ASAP2.Parser.Asap2ParserException: Fehler in der Anwendung. A2PARSER_E_REQUESTED_DATA_INVALID
673804	Close ASAP3.exe -> ASAP3 send not the API command "DisconnectFromTool"
673870	"ETAS Licensing Framework doesn't work anymore" error during License Manager V1.8.5.50 Beta installation
674134	Project exports from INCA V7.3.4 to INCA V7.3.6 HF2 are not compatible in INCA V7.2.17

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5.6 INCA V7.3.6 HF2

5.6.1 Recommended Installation

See INCA V7.3.6

5.6.2 New Features and enhancements

See INCA V7.3.6.

5.6.3 Known issues of INCA V7.3.6 HF2 – Important Hints

See INCA V7.3.6.

5.6.4 Known issues solved with INCA V7.3.6 HF2 – Important Hints

See INCA V7.3.6. Additionally the following KIR-issue solved (see also the ETAS Download Page):

#671134 Working database objects corrupted after database repair
  IF
an Asian OS is used (two byte Char OS, e.g. Japanese, Chinese, Korean, ...)
  AND
database objects which contain strings are edited or newly created
or a database repair is executed
  THEN
these objects are handled and saved incorrectly.
The result is that these database objects are no longer usable.

Affected INCA Version: V7.3.6 (only)

5.6.5 Bug Fixes and Improvements

See INCA V7.3.6. Additionally these duplicated issues are solved with INCA V7.3.6 HF2:

EHI #	Title
671134	Working database objects corrupted after database repair
671000	After repair of database some experiments are not visible in database, one is deleted and the other are not visible. (Solved with #671134)
671103	INCA shows Database loading error even the Database is almost blank. (Solved with #671134)

5.7 INCA V7.3.6 HF1

5.7.1 Recommended Installation

See INCA V7.3.6

5.7.2 New Features and enhancements

See INCA V7.3.6.

5.7.3 Known issues of INCA V7.3.6 HF1 – Important Hints

See INCA V7.3.6.

5.7.4 Known issues solved with INCA V7.3.6 HF1 – Important Hints

See INCA V7.3.6

5.7.5 Bug Fixes and Improvements

See INCA V7.3.6, additionally this issue solved:

This enhancement is only ES820 related. No issue with INCA V7.3.6 (and not published for INCA users)

EHI #	Title
669718	ES820 SP 7.3.6 Shutdown to FBS through PSCI Pin is throwing error

5.8 INCA V7.3.6

5.8.1 Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (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-V7.3 SP6 Whats-new.pdf.
- Enhancements for ETKs:
  - Improved error message in case of wrong connected FETK
  - Solved issues:
    #664854 BR_EXTK-S3.0: Some monitoring variables are inactive in INCA V7.3.x
    #662647 [XETK-S16/XETK-S22]: Raster check uses JTAG access timing with Supplementary D17 instead of trace access timing
- Support of multiple XCP on FLX devices
  In case multiple XCP on FLX devices are configured in INCA on the same FlexRay bus, the FlexRay bus configuration might define that the FlexRay slots to be used for the XCP commands and responses have to be shared. This might results into conflicts, if both ECUs try to send their XCP responses to INCA at the same time, because FlexRay does not provide a collision detection.
  INCA now avoids such XCP ECU response conflicts by waiting for an ECU response,

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before the next XCP command is sent to any ECU.
Solves call: #664741 Not possible to get measurement from two XCP ECUs over FLX

- #666217 Automatically calculated MEMEORY_SEGMENTs include also MEASUREMENTs.
  - This issue is solved with INCA V7.3.6 only for the use case if the option "Calibration of Measurements" is deactivated.
  - But the "Calibration of Measurements" - Option shall not be activated in case of an A2L without a MEMORY_SEGMENT. This will not work!
  Note: Further improvement is planned with INCA V7.3.7
- #654180 ETAS License Manager: How to find out the Act-ID of the customer license when the enduser didn´t know it ->needed to logon into FNO portal for offline return
  This issue is improved with INCA V7.3 SP6 ETAS License Manager V1.8.4.
  An (optional) additional column was introduced in the License Manager GUI to display the ActivationID.
  There is also a new menu entry (right click on selected rows) to copy the ActivationID(s) into clipboard.

5.8.3   Known issues of INCA V7.3.6 – Important Hints

- #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.
- #666217 Automatically calculated MEMEORY_SEGMENTs include also MEASUREMENTs.
  - This issue is solved with INCA V7.3.6 only for the use case if the option "Calibration of Measurements" is deactivated.
  - But the "Calibration of Measurements" - Option shall not be activated in case of an A2L without a MEMORY_SEGMENT. This will not work!
  Note: Further improvement is planned with INCA V7.3.7
- #664132 HWC: OffsetCompensation fails in HWC after the raster rate is changed within the experiment environment (EE).
- #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
  INCA supports only the old "Channel-based mode(legacy)"
- 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.

5.8.4 Known issues solved with INCA V7.3.6 – Important Hints

- #668580 XETK/FETK: Checksum are shown as 0x0 in MPM in case of ACC failed and calibration might be possible
  In case of failed ACC (Advanced Code Check) the error dialog offers two possibilities: Cancel and Continue.
  With Continue the memory page manager is raised w/o further ECU access in order to flash the ECU. Now the checksums are not calculated and the default values 0x0 are shown for RP, WP and code.
  INCA considers the 0x0 as valid and equal checksums and allows download working page and calibration, even if the ECU was not flashed.
  Affected is INCA V7.3.5.
  Solved with INCA V7.3.6

5.8.5 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
419970	INCA overwrites zipped logfiles.
521429	"[WBID4283880068] Primitive failed in: Object>>#at: due to Index out of range in argument 1" when empty CSE change widget to YT osci in VSD
596943	INCA-EIP V7.2: INCA COM API UploadWorkbase with ETarget does not update the checksum - and finally fail.
602465	Copy variable from one oscilloscope to another should keep the properties
609899	Background recoder create measure files with .UNDEF_EXT
612820	FlexRay - Changing parameters at FlexRay-System does not trigger "Project re-assignment" of children
635274	ProF: Installation of the first ProF configuration from the USB stick is not possible
642715	UDSonCAN : INCA fails if signals are configured for multi raster and one of the raster is disabled at runtime
643736	Irrelevant error message by ProF installation
646246	ODX-LINK: Input multi-byte charactor caused sysem crash.
647751	Huge delay when opening experiments which contain HWI.DK/OHI devices with many signals. Note: Improved the corresponding project from 63,5 Sec. to 4.5 Sec.
650766	Not possible to find IPETRONIK modules using BOA V2.28 (x86). Note: Solved with BOA V2.29 (x86)
652031	INCA incorrectly calculates the number of bytes required for memory segment (without memory segment in the A2L-file)
653661	ASAP2Editor: For changes in Tab Axis Description Undo/Redo not possible

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654122	ETAS License Manager: Confirmation windows differ in Offline Return and Offline Migration procedures
654180	ETAS License Manager: How to find out the Act-ID of the customer license when the enduser didn´t know it ->needed to logon into FNO portal for offline return
654303	Recording Date & Time for mf3 measure file not correct (Wrong Start-time is written)
655573	Removed matrix calibrations are still visible in VSD
655996	CDM: Setting to display "device name" in CDM does not work
656002	Process Point and Measure Label does not show same value
656055	Copy in CDM takes very long. Progressbar improved.
656616	INCA repair aborts with an error message if the IPM_DEFAULT_OFFSET_START parameter was set in the InstallationDefaultSettings.xml
657439	EE: Context Menu and Hotkey should work in same way for Label using Curve Axis
657541	INCA changes the FETK Port and writes data into the wrong ECU
657559	EE: Only one Measure File is created if Recorder and Background Recorder using same File Path and File Name
657845	CDM: VSD shows wrong Icon for Label in OFFLINE Segment
657968	EE: Possible to get wrong Inactive Icon on Layer after removing widget
658218	INCA Import of 64bit EE not possible if export option is set to INCA 7 Database
658495	SOME/IP : SOME-IP creates all signal names for all Physical-Ethernet-Channel in the SOME-IP Cluster - even if the variant is not valid
658814	CaliAccess: Possible that Change Marker does not work
659037	ServicePackInstaller: Unhandled exception if SP with MDA & MDA Add-On is installed.
659073	Cannot assign Ipetronik modules as output for ES930
659216	Missing error message during checksum calculation when using wrong block size
659223	Changed export file format is reset after restarting INCA
660322	Context sensitive help link does not work
660355	Single Pointer Calibration depends on serial device. GETK-MC is not a serial device. But in Inca you can only use single pointer calibration together with serial devices.
660407	In the "About Variable" window the A2L text is incorrectly rendered
660531	INCA-SIP: Cannot calibrate values of Simulink.Parameter and Workspace variables in Rapid Accelerated mode
660613	IP Manager: Error message in INCA Monitor Window: "Undefined Interface Instance"
661063	Sporadical Target Server Crash
661159	CaliAccess: Possibly getting unexpected Message Box when using Hotkey for NO_CALIBRATION Axis
661197	EE: Odd graphical representation from Source Tree in VSD using Scale 125% and Big Fonts
661641	COM_API : MultipleAutosarFileContainer [WBID290121514] [WBID4045083203] [WBID905774473]
661739	INCA-SIP: Error when we start 'Connect to INCA' with the customer's model in Accelerator mode
661976	Low Performance when opening an experiment the first time after starting INCA.
662616	INCA API: FlashHexFileWithControlFlow does not work with corresponding ProfKonfig

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ET∕AS

662620	Calibration Access: Labels doesn´t get updated when keyword CALIBRATION_ACCESS is changed to NOT_IN_MCD_SYSTEM
662625	Temporary WB with adaptive curves [WBID3816200632] Primitive failed in: ByteArray>>#uint8At:put: due to Invalid class in argument 2
662647	[XETK-S16/XETK-S22]: Raster check uses JTAG access timing with Supplementary D17 instead of trace access timing
662673	CaliAccess: Possible that change from CALIBRATION_ACCESS from Axis in ASAP2 Editor does not work
662701	EE: Possibly getting WB ([NetWBID2456242161] System.ObjectDisposedException: Cannot access a disposed object.) after Copy and Paste from Backgroundrecorder after some actions
662710	Sporadic [WBID2903626611] An exception has occurred: UndefinedObject does not understand getSystemMenu
662802	INCA-Touch V7.3.5: Import caused system down.
662932	During the measurement, pause recording and resume recording API are invoked. Target server crash is seen sporadically when this action is repeated often.
662998	Targets windows list is not sorted for moving/copying a calibrations
663003	VDS showed wrong function name and its structure in case of double byte coded languages. Solved in INCA V7.3.6 but A2L has to be read again to fix it.
663010	[WBID1037920500] Opening an experimental file containing a scenario config with a specific name causes a system error.
663064	Tab Sequence position is lost when the focus is moved from one input item (Textbox, Button) to another in ASAP2Editor.
663102	Selected rasters in VSD can not be deselected with mouse click
663156	EE: Possible that Undo does not work for all Axes if label uses 2 time same Com Axis
663184	[WBID3899565077] UndefinedObject does not understand mult - Import of key variable list crashes INCA
663287	Recording with calculated signals might fail in case of multiple devices
663331	MDA : fail to open XDA with Calculated Signal using the same signal from 2 devices but trigger only on one. Solved with MDA V8.5.6
663357	INCA doesn't read character code in character string in dbc file
663400	ASAP3 window shuts at SET DAQ POINTER command (iLinkRT V2) for second DAQ. Note: Already solved with INCA V7.3.5
663613	CDM Setting "Show device name" does not work properly
663770	DB: Getting wb ([WBID620330766] UndefinedObject does not understand deferRedraw:) after using Collapse All after some other actions
663839	INCA V7.3. ASAP3.exe uses over 30% of CPU resources.
663844	ASAP3 Execution stops with Dialog box
663927	EE: Possibly getting unexpected Message Box after using Reset To Ref Page Value
664248	ES820.1: Feature "Support of 2nd INCA master on the network" (V7.2.15) does not work with V7.3.5
664399	WB ([WBID22959675] ASAP2BytesStdAxisDescription does not understand updateCalibrationAccessStateOnCalibrationObject) when changing Access in ASAP2 Editor
664454	DB: After changing Icon Size the Icons from 3 Experiment are not any longer visible
664485	RT_GET_AVAILABLE_MEASUREMENTS / CHARACTERISTICS Request to actually get the measurement names, INCA won't answer in case of large project (here ~11000 Measurements)

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664553	XETK/FETK failing use case with the ASAP3 Mode detection after latest modifications
664741	Not possible to get measurement from two XCP ECUs over FLX
664807	INCA Crash with dmp file if customer create an calculated signal, if signal name is not matching naming convention
664854	BR_EXTK-S3.0: Some monitoring variables are inactive in INCA V7.3.x
664929	CDM shows wrong value (from another label) for calibrations due to GUI update issue. Workaround: Change column size to update GUI
664957	INCA ASAP3 Connect Information not overtaken
665373	INCA-CANTransmit does not work with DBC files with CAN extended option
665486	DB: [WBID1217843348] UndefinedObject does not understand background - after selecting other labels after changing Ref Axis CALIBRATION_ACCESS
665538	Replacing of device names leads to invalid calculation methods. Improved with INCA V7.3.6 (behavior is now same like former versions. Further improvements planned)
665642	Add AUTOSAR file to container - weird behavior when trying to add a erroneous AUTOSAR file again and again
665781	EE: WB([WBID3997169402] Primitive failed in: EtasWrapper>>#abtPrimHashInt:seed: due to OS error126) when closing VSD after activation from Calibration from Measurement
665828	CDM: Process points on Y-AXIS did not follow both MONOTONY and limit
665969	HWC tree updates slowly when Hardware status window is open. Performance improved substantially.
665971	Vector vCAN missing CAN devices in SFH (search for hardware) result
666068	Problem mit der Prüfsummenberechnung in INCA V7.3.5 mit BR_EXTK-S3.0
666188	After using the INCA Experiment without a connection to the hardware, there are problems with the initialization of HW
666191	EE Possible that EE is hanging and not any longer possible to close after "Discard" Recording
666202	Recorder doesn't start. Solved with #667013
666217	Automatically calculated MEMEORY_SEGMENTs include also MEASUREMENTs.
666411	ETAS License Manager: Grace Mode for INCA Add-On CANTransmit does not work
666490	Parallel FLX-Monitoring and XCPonFLX-Connect not possible
666498	ETK Tools: Scripted xct file generation does not work as expected
666672	DBC file cannot be read into INCA 7.3. (V7.2.17 works)
666834	DB: Possible that from INCA created A2L could not added again in case of combination of XCP (memorySegments defined in a2l) and opening the a2l editor
667013	Recorder cannot be started after ASAP3-Disconnection
667115	CDM copying axis value but failing to update linked map
667207	INCA removes datasets in database when from imported file ASAP2-editor or HWC will be opened. Note: Exp. file corrupted which needs repair.
667777	INCA-Touch: Activated FNE license was not shown LiMa
668580	Checksum are shown as 0x0 in MPM in case of ACC failed and calibration might be possible

5.9 INCA V7.3.5 HF2

5.9.1 Recommended Installation

See INCA V7.3.5

5.9.2 New Features and enhancements

See INCA V7.3.5.

5.9.3 Known issues of INCA V7.3.5 HF2 – Important Hints

See INCA V7.3.5.

5.9.4 Known issues solved with INCA V7.3.5 HF2 – Important Hints

See INCA V7.3.5

5.9.5 Bug Fixes and Improvements

See INCA V7.3.5, additionally this issue solved:

EHI #	Title
664929	CDM shows wrong value (from another label) for calibrations due to GUI update issue. Workaround: Change column size to update GUI

5.10 INCA V7.3.5 HF1

5.10.1 Recommended Installation

See INCA V7.3.5

5.10.2 New Features and enhancements

See INCA V7.3.5.

5.10.3 Known issues of INCA V7.3.5 HF1 – Important Hints

See INCA V7.3.5.

5.10.4 Known issues solved with INCA V7.3.5 HF1 – Important Hints

See INCA V7.3.5

5.10.5 Bug Fixes and Improvements

See INCA V7.3.5, additionally this issue solved:

EHI #	Title

663844	ASAP3 Execution stops with Dialog box

5.11 INCA V7.3.5

5.11.1 Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (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-V7.3 SP5 Whats-new.pdf.

5.11.3 Known issues of INCA V7.3.5 – Important Hints

- #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
  INCA supports only the old "Channel-based mode(legacy)"
- 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.

5.11.4 Known issues solved with INCA V7.3.5 – Important Hints

- Important hint to new feature with INCA V7.3 *Ethernet/SOME_IP Monitoring on local network cards*
  INCA supports local network cards for Some/IP and Ethernet monitoring interface. To receive Jumbo frames or VLAN tagged frames additional network card specific setting could be needed. Network cards with not unique MAC address will be ignored (e.g. virtual network loop back adapter). Also network cards with DHCP IP address will be ignored.
  This feature prerequisites the manual installation of WinPcap V4.1.3. The installation is located in the INCA V7.3 Service Pack or DVD in folder **\Tools\WinPcap**

Note: Solved with INCA V7.3.5. The manual installation removed and replaced by an automatic installation. Additionally it is possible to configure the installation of Npcap within the **00_Prod_INCA_735_x64/InstallationDefaultSettings.xml**.

```
<Package
   ID="3rdParty NpcapOEM"
   displayName="Npcap OEM">
   <CustomParameters>
    <Variable
      name="InstallNpcap"
      defaultValue="true"
      validation="none"
      description="When set to true npcap will be installed, otherwise npcap
                  installation will be disabled" />
   </CustomParameters>
  </Package>
```

- #660019 Export of workspace with FLX project cannot be used in former INCA version
  Due to an important improvement in INCA V7.3.4 for the
  Call 589697: Autosar2A2LConverter: FlexRay cluster filtering doesn't work correctly
  it was necessary to change the internal data model of the FlexRay-Monitoring Device.
  Due to this change, the FlexRay part of exports from INCA V7.3.4 and higher are not compatible with INCA V7.3.3 and lower. If imported in INCA V7.3.3 and EE or HWC opened, then the FlexRay signals will be removed without a warning.
  With INCA V7.3.5 an improved handling was implemented, which leads to a warning in INCA V7.3.3 and lower that FlexRay part is not compatible.

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
308306	EE: Different behavior after used Calculated Signal was deleted in the EE or via VSD
550456	Curious phantomwindow avoid closing EE
555147	EE, DisplayConfiguration: The variables displayed in EE display configuartion tab is not in sync with Variable selection tab.
561646	1 x [WBID306560295] UndefinedObject does not understand isCANController
575741	INCA V7.2: 'Confirm Delete' of EE-Layers in the Variable configuration dialog: Dialog is not visible completely
581210	[NetWBID2014982987] System.NullReferenceException: Object reference not set to an instance of an object
587044	AddressOverlap: Possible after some Cancel action the canceling is not any longer possible
588717	Messliste - selected group of variables not supported by drag & drop if at least one variable is part of the messliste (measure table)

593532	Bitmask in Calibration and Measurementwindow is not enlarging when enlarge the window
594530	[NetWBID324319256]System.NullReferenceException: Der Objektverweis wurde nicht auf eine Objektinstanz festgelegt.
597055	VSD Raster Pre-Selection is very slow. Improved by factor 2.
597700	INCA Crash during copying/moving the measured variables from layer to layer in the Display Configuration pane: [NetWBID1245943360] System.ArgumentException: An item with the same key has already been added.
602438	VSD: Variable containers are sorted based on Type when Name column is selected
603294	VSD: Title sorting is done in incorrect order
605811	[NetWBID1225564338] System.ArgumentException: Timestamps do not fit pixel offset from previous calls. Previous: 0 now: 400000000
606653	VSD: Function Filter does not work
610155	[NetWBID2980362903] System.ArgumentException: The signalValueAccess is null or disposed. Parametername: signalValueAccess
617217	ACC Cancel does not skip ECU initialization
618788	ASAP3 Lock window is not working after reinitialisation of ECU
619007	[NetWBID4188582023] System.ArgumentOutOfRangeException: Das angegebene Argument liegt außerhalb des gültigen WertebereichsExperiment_Read or write hexfile if measurement name contains [1..1]
625171	[WBID2760800977] UndefinedObject does not understand items
626625	[WBID3421345940] UndefinedObject does not understand title
626792	[WBID1721526122] UndefinedObject does not understand isManaged
632716	Memory Page Window display get something wrong after Flash Programming without Clibration ascess enabled
633926	VSD, Grouped Differences: [NetWBID224214279] System.NullReferenceException: Object reference not set to an instance of an object.
636647	Ethernet/SOME_IP Monitoring on local network cards
637005	EE: After reopen EE with reactivated label order in Calibration Widget is changed
638978	EE: Axis in Graphical Area shows value is Hex and not in Dec for VTab Range Label
643333	ACC improvement does not work as expected: The ECU is completely initialized, this can lead to an error when subsequently the ECU flashing is started.
643853	Calculated Signal was not exported in multi-byte path. No error message shown.
643930	ETK Tools: No possibility to configure "Overload error behavior" for XETK in XCT
647046	ODX-Link: 32bit addressing did not work
648135	Wrong warning (translation in user interface) in CDM by copying a cuboid from a CDFX file into a s19 file
649028	Calculated Signals: GUI Text is partially missing on a button of calculation signal window
649049	After EXIT of ASAP3/API the ProF flow procdure runs in ASAP3 mode (supresses all message boxes)
649593	INCA-ODX: Title of Data Logging Configuration Window not translated
650056	ES830 cannot start with ES930 for bypass and ES415 for INCA measurement
650089	ES830: ES830 on Flexray RP Parallel MC after restart not possible

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650096	Multiple Autosar File Container : Write -> AUTOSAR... - suggested *.zip file name is strange. Expected is name of ZIP.
650099	MultipleAutosarFileContainer : Write -> AUTOSAR ... - irrelevant info in INCA_Monitor.log window
650115	Replace FIBEX file for Flexray monitoring with a different one for XCPonFLX fails
650118	LDF (LIN): Replace fails and shows a wrong error message
650183	Replace DBC (CAN) files works worse than with A2L files - default path is only updated with "add" but not with "replace"
650201	J1939 (DBC) : Replace J1939 -DBC file for J1939 monitoring fails and shows a wrong error message if filename is different
650593	EE: Shift-Down selects only 2 Labels in VSD EE Tree
650711	ODX AddOn uses outdated device in the ODX example workspace (ES581.3)
651237	INCA Snapshot Max permission file size setting does not exist in the snapshot setting field
651562	Signal representation in second PDU missing
651648	Ethernet Monitoring Signal not visible: INCA cannot measure Ethernet-Monitoring or SOME/IP signals if the AUTOSAR files does not define a UDP port for the corresponding channels
651867	ODX: Snapshot content for "append" mode do not working
652444	INCA freezes during ECU project creation
652559	Rendering issues in DB Browser after change display scaling. Project or hardware list might be no longer displayed properly.
652561	Not possible to remove inactive variable from some Experiments
652796	When system error appears the corresponding text is not completely visible
652929	ETK T2.2 - Walk Back [WBID3195182827] --UndefinedObject does not understand device -- occurs while initializing hardware with specific A2L
652982	DB: Paste from CSE partly not possible in 3 Experiment Elements
653205	INCA V7.3: Database limited to 4 GByte but 64bit DB is in use - after import of a V7.2 Export and following DB Repair.
653269	INCA Menu "Contents and Index" opens in "Index" tab - but should better open in the "Contents" tab
653406	EE: Possibly Rasters in Var Config Tab not changeable
653514	Multiple Autosar Files: PDU clusters are deleted when specification file is added to Autosar file extract
653516	Online Help ETAS Network Manager outdated
653525	INCA-CANTransmit: COMPU_VTAB_RANGE Variables are not overtaken into DBC Generator. Note: New API with INCA V7.3.5.
653543	EE: Zoom to fit does not work for Osci using Int64 labels
653604	EE: Possible that Label is reactivated on wrong Layer if done via KVL
654063	Grouping disabled when opening Hardware Configuration from EE. Grouping is possible via Mouse or keys, but changing the cluster name or the leading device is not possible, if an EE or a CDM (from an EE) is open. Tooltip added as well.
654295	ETAS License Manager: Online Migration / Offline Migration: Japanese text was not shown
654365	ETAS License Manager: Opening dialogs took over a min
654447	EE: Possible that deactivated label is wrongly active again after save, close and reopen from EE
654448	EE: Save EE with many inactive labels is very slow (aborted after one hour)
654626	LiMa v1.8.1: Offline activation failed. The online/offline activation did not work, because it is a FNP (classic) license type.

654774	CDM: Possible getting different results when making CDMCompare 2 times (wrong number of errors)
654788	[WBID931622758] MCSDSMErrorGeneration does not understand isDeviceGroupCompatibleTo
654954	IP-Neuzuweisung description wrong in online help
654958	INCA export of EE (layer) has same size as exp itself. Note: With INCA V7.3.5 improved by factor.
655118	Adding an AUTOSAR .zip container does not work as expected. Note: For INCA V7.3 SP5 prevent adding compressed files. Adding Zip-files functionality is planned with an upcoming SP.
655128	KL15 signal is not visible in ETH-Mon when another signal added to EE. Note: Already solved with INCA V7.3.3
655186	Raster fill level shows wrong color for FETKS
655322	Acquisition problem 64-bit length FLX signals. Note: AUTOSAR file corrected/updated.
655495	SOME/IP Hardware Initialization Error: INCA cannot measure Ethernet-Monitoring or SOME/IP signals if the AUTOSAR files does not define a UDP port for the corresponding channels.
655814	EE: Possibly getting empty entry in EE Tree from VSD
655914	EE: Getting WB([WBID813805516] EtasMemCombinedCalibrationWidget does not understand resetHeadings) when using Edit -> Select all Values for BLOB
655919	EE: Remove variable does not work for BLOB
655922	CDM Compare: Too many entrys in CDM_ERR.LAB
655983	Autosar Single Pointer "Automatic Reconfigure" does not work as expected ('Online calibration not possible..')
655992	CDM Compare: To many entrys in CDM_ERR.LAB
656010	Resource leak in Measure Window Right Click Action
656021	INCA change channel name of ES4xx Module with "shift + M" opens OPEN Dialog
656195	MPM, CCP: Walkback during UPLOAD without MEMORY_SEGMENT
656393	INCA freezes by attempt to add a BP calibrations map or curve
656581	Keyword MONOTONY NOT_MON of AXIS of MAP does not work
656598	Help text for (F/X)ETK parameter weird
656632	[NetWBID696086427] System.Runtime.InteropServices.ExternalException: Der angeforderte Clipboard-Vorgang war nicht erfolgreich.
656704	EE: Possibly getting wb ([WBID3317290831] DEDataBlob does not understand atomicCheckMonotony:andSetFrom:to:withIndexDo:) after Undo for BLOB
656746	Defining the EPK in OFFLINE_DATA ROM makes the EPK inaccessible form INCA DB in MPM
657140	XETK configuration does not match. Different interpretation of the same A2L between INCA V7.2 and V7.3
657209	INCA V7.2: Measurement can not be stopped with API command and following communication failure. Note: Solved with INCA V7.3.0ff.
657210	EE: Possible that it is not any longer possible to make label inactive
657220	[WBID3892039228] Walkback when Adding VTAB label to existing Combined Editor
657347	CDM: Possibly getting wb ([WBID2045968444] ASAP2Function does not understand calibrationAccess) when try to open CDMConfig
657541	INCA changes the FETK Port and writes data into the wrong ECU
657647	CCP COM API: Reading A2l+XML Dataset via API only imports A2L File, but not the Dataset

657814	INCA V7.2 database migration into INCA V7.3 SP3 failed if Database objects contains A2L with include files (XCP1.0 (only old Projects with INCA V5.2 or former)), ODX or ECU Docu might be affected)
657841	
657856	developer call
658114	ETAS License Manager create a logfile path in a undesirable area.
658211	HWC: After pressing Enter in Add HW Device Dialog first entry in list is selected and not as expected Ok button triggered
658402	CDM can not connect DCM and A2L if Unit is not the same
658403	CDM can not connect DCM and A2L if variable does not contain in A2L file
658404	CDM can not connect DCM and A2L if Variable is in Wrong Memory Segment
658406	[WBID3967379646] MCSDSMErrorGeneration does not understand isDataEnumeration if in CDM Variables in wrong Memory Segment will be edit
658414	CDM not possible to connect A2L file to DCM
658471	CDM: Wrong Action Name in CDM Error Files. "Compare" instead of "List all".
658733	A2L file with SERAM memory type can not be used for FETK projects
658902	Unable to import arxml in INCA 7.3.3
658920	INCA-SIP: Not possible to calibrate SIPDllDemo project. DllDemo Error: The memory location is not accessible.
659218	Walkback for Cuboid at Process Point calculation
659279	EE: WB([WBID3077853104]) when try to make calibration Action for Rescale Axis Pairs in Customer Instrument
659517	INCA Targetserver crash after reinit
659649	MDF4 placing "Time source Block" on wrong position in HD block
659763	RAMCal Feature doesn't work as expected
659786	MCD 3MC 1.0.1, MCD 3MC 2 und ASAP3 ignor option "Use hard bound limitation"
659817	Startup dialog covers query for import of user settings
659863	INCA online help improving regarding the description in the user options for write index to measure file
659938	[WBID4222947457] MCSFileASAP2DataElementManager does not understand allChildren : Observed while reimporting same experiment
659953	AUTOSAR Converter: Duplicated Ethernet channels in merged result
660019	Export of workspace with FLX project cannot be used in former INCA version
660176	ES4xx - Import of measurement schemes: Declaration line shall be evaluated
660228	EE: Background color for Axis in Comb Editor indicates sometimes that it is possible to edit Axis Values but this is not possible
660485	DOIP FreeRunningMode Measurement: INCA mixes TARGET_ADDRESS and SOURCE_ADDRESS
660656	SOME/IP Monitoring - Exception in Signal Extraction configuration is not caught
660721	All signals are removed from INCA-EE during first start of EE after COPY action in CDM
660811	Wrong byte order for RAMCAL with FETK. Recommendation: Change A2L
660850	SOME/IP Hardware Initialization Error: INCA cannot measure Ethernet-Monitoring or SOME/IP signals if the AUTOSAR files does not define a UDP port for the corresponding channels.
661166	VN8972 Integration: Only 1 FLX-Device possible
661169	VN8972 Integration: CAN-Device is deleted after multiple system replacing
661892	[WBID124679187] UndefinedObject does not understand createInterfaceOptionEntriesWithTypeReferencesForSystem:interfaces: at replace system (ES582 vs. ES891)

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661976   Low Performance when opening an experiment the first time after starting INCA.

5.12   INCA V7.3.4 HF1

5.12.1   Recommended Installation

See INCA V7.3.4

5.12.2   New Features and enhancements

See INCA V7.3.4.

New enhancement with INCA V7.3.4 HF1:

INCA cannot measure Ethernet-Monitoring or SOME/IP signals of an AUTOSAR description file, if the AUTOSAR files does not define a UDP port for the corresponding channels, because the port is dynamically assigned in the Vehicle.

This issue has been fixed. Signals without port definition can now be measured in INCA.

Solves Calls:

- #651648 Ethernet Monitoring Signal not visible: INCA cannot measure Ethernet-Monitoring or SOME/IP signals if the AUTOSAR files does not define a UDP port for the corresponding channels

- 655495 SOME/IP Hardware Initialization Error: INCA cannot measure Ethernet-Monitoring or SOME/IP signals if the AUTOSAR files does not define a UDP port for the corresponding channels.

5.12.3   Known issues of INCA V7.3.4 HF1 – Important Hints

See INCA V7.3.4 additionally:

#660019 Export of workspace with FLX project cannot be used in former INCA version

Due to an important improvement in INCA V7.3.4 for the
Call 589697: Autosar2A2LConverter: FlexRay cluster filtering doesn't work correctly
it was necessary to change the internal data model of the FlexRay-Monitoring Device.

Due to this change, the FlexRay part of exports from INCA V7.3.4 and higher are not compatible with INCA V7.3.3 and lower. If imported in INCA V7.3.3 and EE or HWC opened, then the FlexRay signals will be removed without a warning.

With INCA V7.3.5 an improved handling will be implemented, which leads to a warning in INCA V7.3.3 and lower that FlexRay part is not compatible.

5.12.4   Known issues solved with INCA V7.3.4 HF1 – Important Hints

See INCA V7.3.4

5.12.5   Bug Fixes and Improvements

See INCA V7.3.4, additionally these (duplicated) issues are solved:

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EHI #	Title
657814	INCA V7.2 database migration into INCA V7.3 SP3 failed if Database objects contains A2L with include files (XCP1.0 (only old Projects with INCA V5.2 or former)), ODX or ECU Docu might be affected)
651648	Ethernet Monitoring Signal not visible: INCA cannot measure Ethernet-Monitoring or SOME/IP signals if the AUTOSAR files does not define a UDP port for the corresponding channels
655495	SOME/IP Hardware Initialization Error: INCA cannot measure Ethernet-Monitoring or SOME/IP signals if the AUTOSAR files does not define a UDP port for the corresponding channels.

5.13   INCA V7.3.4

5.13.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (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-V7.3 SP4 Whats-new.pdf.

5.13.3   Known issues of INCA V7.3.4 – Important Hints

- Important hint to new feature with INCA V7.3 *Ethernet/SOME_IP Monitoring on local network cards*
INCA supports local network cards for Some/IP and Ethernet monitoring interface. To receive Jumbo frames or VLAN tagged frames additional network card specific setting could be needed. Network cards with not unique MAC address will be ignored (e.g. virtual network loop back adapter). Also network cards with DHCP IP address will be ignored.
This feature prerequisites the manual installation of WinPcap V4.1.3. The installation is located in the INCA V7.3 Service Pack or DVD in folder **\Tools\WinPcap**

- #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
INCA supports only the old "Channel-based mode(legacy)"

- 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

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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.

5.13.4   Known issues solved with INCA V7.3.4 – Important Hints

- #650352 INCA Add-On VoiceRecorder: Performance issue when stopping the measurement when the INCA Add-On VoiceRecorder is in use
  If INCA Add-On VoiceRecorder is used
    AND
  FlexRay - Monitoring is in the hardware configuration
    AND
  a measurement is recorded
    THEN
  with a very few experiments, the "Save File Dialog" may take a long time to open (up to approximately 5 Minutes have been reported)
  Workaround: Either remove FlexRay - Monitoring or VoiceRecorder from the hardware configuration.
  Affected INCA Version: INCA V7.3 SP3

- #649786 IPM Server doesn't save the manual set IP-address
  INCA supports only the old "Channel-based mode(legacy)"
  Manually setting an IP start adress in the Network Setting Dialog does not work when the following conditions are all met:
  1. The selected Network Controller is the same as configured in the IPMServer.xml settings file
  AND
  2. The IP adress saved in the IPMServer.xml is the same like the one set for the used controller
  AND
  3. The user presses the "next" button, before pressing the "finish" button
  Affected INCA version: Reproduced with INCA V7.2.17 and INCA V7.3

5.13.5   Bug Fixes and Improvements

- Notes:
  - Some isssues 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
419329	DB: Objects possibly imported into wrong Path
450886	CSE: Variables exists in CSE even when CSE config was not saved
504365	[WBID607145590] CANDBMultiplexAndModeSignal does not understand addModeSignalInfo: - when reading CAN-DB file
524788	VSD : Raster selection list is blank in Variable Configuration

526836	[NetWBID3637517699]System.OutOfMemoryException: Nicht genügend Speicher verfügbar, um das Programm weiter auszuführen.
527527	[NetWBID1066869192] System.ArgumentNullException: Value cannot be null - when trying to delete former 'record only' variable from measure window
528124	EE: Possible that after reopen VSD Source Tree is not any longer shown starting from the top
532262	[WBID1696293060] Primitive failed in: String>>#at: due to Index out of range in argument 1
557033	Inconsistent widget back color in VSD and EE: When the horizontal or vertical bar is created in VSD, the background color is different than in the same widgets created in the EE.
559699	CDM: Only Partly shows the Select Source / Destination Dataset Dialog the corresponding Data Set as selected for projects with key variable list
559943	IEEE1588 TimeSync: Roundtrip times of all ETKs are influenced negatively by IEEE1588 Timesync every 10 seconds
561230	VUI: Wrong Range value will be displayed in property details of widget VUI - SliderEditor
562568	ASAM container: After reading ecuzip container, its contents stay as extracted on the file system
562993	Shortcut "alt +q" in INCA-VSD doesn't work
564820	EE: Possibly getting WB after leaving Recorder Manager with ESC - [NetWBID117715929] System.ArgumentOutOfRangeException: Index was out of range. Must be non-negative and less than the size of the collection.
565194	[NetWBID4215241914] System.ArgumentException: A TreeNodeAdv that was not a child of the TreeViewAdv was added to the TreeViewAdv's SelectedNodes collection. This is not allowed.
567966	EE : CSE table data becomes blank while switching to WP
569858	ASAP2Editor:Tab sequence is incorrect for few tabs in ASAP2editor
569910	VTabBounds: Edit Axis Point does not work for Data Rep = Impl for Customer Instruments
571794	Exchange CDM-Configuration in WS titel disappears
576601	Variables configuration: If a "No Match Variables" is selected and a filter is set e.g. "Measurements" and Shift+narrow up or narrow down is pressed Then [NetWBID53900694] System.NullReferenceException: Object reference not set to an instance of an object
576624	Checkboxes in recorder configuration are deactivated after recording with MCD 3MC V1.0
578787	VSD: "[NetWBID2949627690] System.ComponentModel.Win32Exception: Error creating window handle." can occur when clicking long in vsd to increase user handles
580623	VSD : INCA becomes not responding while editing layer name
581286	Osci: Display configuration settings of oscilloscope are not retained when the variables are made inactive and then selected back
581396	VSD: wrong position of selection of signal for useing "text search"
582191	CDM || EE: Source dataset gets empty and moves to Destination, when trying to add already existing dataset.
585571	VSD LabFiles: [NetWBID1301935282] System.ArgumentOutOfRangeException: Specified argument was out of the range of valid values. WB occurs when trying to add .ecuzip as a lab file.
586548	EE: Label is added to new widget after Label is activated via KVL
587582	DB: Via Copy & Paste in 3 Experiment Elements it looks like that 2 CSE are in the same EE possible
589697	AUTOSAR: FlexRay cluster filtering doesn't work correctly

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590748	EE: Possible that Inc/Dec step is different for Input and Scale for a Rescale Axis Pairs
591779	[WBID4253371345] UndefinedObject does not understand sections
595778	EE: Possible in Notes Tab from About Box also when using Scroll Bar complete text not readable
596183	HWC: Possible that Mouse cursor disappears and is not visible on any area where INCA is visible after clicking into Search field and pressing Space key in Add HW Device Dialog
598008	HWC: Possible that Next Button is not moving to next entry in Add HW Device Dialog
598994	[WBID1724472015] UndefinedObject does not understand value - Walkback in INCA: after multiple selecting of variables, holding Ctrl key and clicking ‚display' in a key variable list
600258	EE: Odd Representation in VSD and VSD is hanging when rename of item is not completed but several other actions executed in parallel
603316	When sorting in a very big project the VSD is greyed out for some seconds --> working symbol is needed!
605109	Performance: Time taken to open Experiment environment is improved compared to INCA V7.2
607316	EE: After closing Measure Array, Selector size from the Name Column is resetted
607394	EE: Possibly Measure Matrix shows all Measure Labels with disabled Rasters
607623	EE: Possible that Raster Drop Down List on Variable Configuration Tab is empty
607733	HWC: Possible that during Serch in HW Dialog Button are working and short keys not
608521	EE: Combined Editor shows for Rescale Axis Pairs Monotony Arrows but Rescale Axis Pairs does not work with Monotony coming from A2L File
608849	[WBID612512492] Exception in UI process
609161	Columns in VSD after change/shifting not safed and after opening again on old positions
610507	Vertical scrollbar not usable in combined editor if table is shrinked to minimum size
612639	After scrolling to the right, the names are not completely visible in VSD, raster configuration
614273	Raster Reassignment: Possibly getting different result when used functionality in different order and getting not needed inactive label
614855	[NetWBID1156751323] System.NullReferenceException: Der Objektverweis wurde nicht auf eine Objektinstanz festgelegt
619856	EE: Possibly is INCA hanging after try to rename widget in VSD Tab Disp Config
619871	EE: Copy & paste from empty widgets in VSD Config Tab does not work
620235	Wrong information of mouseover from Snapshot and open MDA from experiment during recording or in measure view.
621059	Scenario cannot be switched after saving it as CDF file
622715	INCA Scrollbar flickers in experiment if the titlebar of one window is a little bit outside of the visible area
623031	INCA-CANTransmit: Missing samples on Ethernet Devices
624151	INCA closed without warning during read of hexfile when path +hexfile-name has more than 256 characters
624314	[WBID306560295] String does not understand between:and:
625007	[WBID4161453859] UndefinedObject does not understand checkEditableCalibrationObject:
625925	[WBID3014711700] UndefinedObject does not understand multiRecorderFassade

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ETAS

628153	ASAM MCD3: [WBID3771094836] SGASAP2Project does not understand getFolderPathName -> Open Workspace with ASAMMCD3 V2.2
629744	Experiment variable automatic remap is ignoring second Ethernet device when only one is defined in the WP
630040	[WBID1019849470] UndefinedObject does not understand textCr:
631070	Calibration window can not be renamed
631342	A2L read error with UTF-8 format in multi byte characters
631355	ASAP3 Define Recorder Parameters overwrites standard recorder permanently together wit auto increment
631818	INCA V7.3.0: Performance HW Initialize is slower in INCA 7.3 compared to INCA V7.2
633716	CDM Copy paste is not working if Inline compare is active
634975	INCA new experiment with Key variable list can not start recording --> invalid Parameter
636089	ETAS Network Settings GUI cannot be resized
636092	Measure table and Oszi are rounding differently (UINT64)
636093	EE: Osci with VTab Label the values from Axis Tickmarks are not using Data Representation = Dec
636328	Rendering issues in VSD after the resizing of toolbars
637019	CDM: About Variable Dialog in CDM Usability: Invisible Frame Seperator
637429	[WBID3588130970]Primitive failed calling 'user32.dll':InsertMenuA from PlatformFunction>>#callWith:with:with:with:with: due to Invalid reference in argument 2
637634	Int64.MinValue(-9223372036854775808) was not set on oscilloscope
637954	DaisyChain: DaisyChain GUI update of tree view and table view does not match e.g. after "download configuration"
638107	Value column of Osci is expanded
638180	Generation of PDF for extended logging requested, such that the instructions could be read after INCA is closed.
639804	[WBID2988498975] String does not understand equalsIgnoreName:
640955	CDM Online Add Variable Selection Window does not open About Variable Window for Calibrations
641236	[WBID2917960526] Primitive failed calling 'user32.dll':RemoveMenu from PlatformFunction>>#callWith:with:with: due to Invalid reference in argument 2
641288	[WBID2510360799](ExCLDTKeyNotFound) Key not found.
642873	INCA crashes at Layer change in Experiment during running Measurement - [WBID3549077819] UndefinedObject does not understand setTextAlign:
643749	[WBID143104694] EtasAPIWorkbaseDevice does not understand isCANMonitoringDevice
643985	[WBID742451634] process cannot be resumed. INCA crashes when ETK paramaters where changed in HWC and the tab switched to ODX parameters
644079	While adding datset in INCA getting an error "Hex file_chksum error in IntelHexSegmentStartRecord at address 0x0"
644648	INCA Wrong window title (reading CVX file) when reading incorrect DCM file
645458	INCA often bad time synchronisation with CSM 1MHZ Modules PTP - ES882
645480	INCA & CSM: INCA stops with message storing mdf and is not usable anymore. Note: Solved with release version of CSM INCA 7.3 AddOn ETH V2.0.0.
645573	INCA HexPostTreatment is changing contet of BigData Feature
645985	1 x [WBID2223901620] Primitive failed calling 'user32.dll':InsertMenuA from PlatformFunction>>#callWith:with:with:with:with: due to Invalid reference in argument 2
646154	[WBID3212729947]UndefinedObject does not understand >

646210	Some characters in SYMBOL_LINK (containing "}" or "{" or ":",) lead to empty VSD. Note: In case with a former INCA version: A2L must be read again to update INCA DB.
646700	CDM: QMD Icons not shown in Multi Column view at first opening
646818	Grouping icon is incorect after deleting grouped ECU: The icon should be greyed out beacause the group only contains one element.
646980	ES820: INCA V7.3.2 crashes during DR Export. Recommendation: Change the export options. Deselect "one file for each item"
647384	INCA DB Export : Multiselect use-case with File Format = "INCA 7 x64 database" is using *.exp but should use *.exp64
647398	1 x [WBID2299210828] Primitive failed calling 'user32.dll':RemoveMenu from PlatformFunction>>#callWith:with:with: due to Invalid reference in argument 2
647521	VN7600 UDSonCAN: Initialize Hardware fails with UDSonCAN and VN7600
647527	INCA V7.3.3: Inconsistent behavior in Combined Editor with VTAB_RANGE values
647545	AUTOSAR Container: Multi AUTOSAR files with different Flexray Cluster - VSD does not filter Signals of configured Flexray Cluster & Flexray Controller
647556	INCA-ToolApi: AddFunctionsToListUsingMask always returns ‚True‘
647562	INCA creating new DB with space after Name is possible even if it is not allowed in Windows (blanks at end)
647657	INCA-ODX-LINK: Wrong German translations for some strings
647670	Missing calibration history icons in the Multi column view
647757	CDM Multi Column: The information about Quality gets not updated when creating a new quality entry in the info area
648049	EE: Min Default Value for Y Axis Range is not set to any value after creating Plattform YT Osci with S64 Label
648282	INCA-MIP Manual misses information about the environmental variables, which are required for execution of compiled m-files
648696	Signals are still available in the VSD eventhow the Flexray cluster does not exist anymore
648718	INCA & CSM: TimeSynchronization - CSM A1b driver - monotony issue with SynchronizeToReferenceTime(). Notes: Solved with CSM INCA 7.3 AddOn ETH V2.0.0
649054	CDM performance when adding variables via VSD in CDM
649175	Replace AUTOSAR, Fibex, LDF (generic driver) files works differently (worse) than with A2L files - default path is only updated with add but not with replace
649184	Database browser updates slowly Project/Device container. Performance improved.
649192	Lookup Generator has wrong path to Perl exe
649563	ASAP2: Values are not shown as Read Only after changing Access to Read in ASAP2Editor
649595	Exported XML file out of experiment for configuration protocol writes wrong rate / raster when array is used.
649751	INCA-ODX: Service Inspector Configration shows error "to many requests". Note: In case more than 2000 requests would have to be sent, a "Too many Requests" error is shown and the execution is rejected because this would take very long time or freeze INCA.
649763	EE: Changes from size of columns in Hardware Status are automatically reset
649786	IPM Server doesn't save the manual set IP-address
650015	1 x [NetWBID1971169032] System.InvalidOperationException: Element 'ZFFSAB._.GradLimEngTorqOut.iv_mg_engmax\XETK' with ID ID681519901 not found in input XML for VSD

650051	EE: After Drag&Drop from 1 label are 2 labels removed from Measure Table and only one added to Osci
650109	INCA - logfiles cannot be send when Microsoft Outlook 365 is in use
650122	ETAS License Manager V1.8 : Grace mode reset function does not work if licencing files were invalid
650170	Multi ECU Cluster: Clustered devices can be grouped in the database browser but the ECUs are clustered already
650199	INCA7.3: CRETA 5R3.4 64-bit Version: Get Dataset including CDFx file does not work
650217	[WBID2042219761] Array does not understand isWorkPage
650249	INCA V7.3 - eCDM: Pulling CDFX files with meta data from CRETA into INCA fails with error "Ensure that the AddOn supporting that format is installed".
650352	INCA Add-On VoiceRecorder: Performance issue when stopping the measurement when the INCA Add-On VoiceRecorder is in use
650646	EE: About Box does not shown given Monotony from Rescale Axis Pairs
650680	[WBID4074343720] UndefinedObject does not understand applicationHistoryEmptyOrNil
650854	[WBID466380708] String does not understand - Show processpoint with mixed axes causes system error
650883	INCA-SIP: Incorrect Indexing for 2D Measurement Data Acquired Through INCA COM
650941	QMD status not displayed for the selected labels in CDM in the multi-column view if adding only one dataset as source
650998	[WBID3819891318] UndefinedObject does not understand setBoundsCheckCancelled
651207	[NetWBID4180225588] System.ArgumentException:　　Occurs after setting empty value for Widget or Layer name in Display Configuration
651208	EE: INCA allows empty string as name for Layers and Widgets from Property Grid but not from the Experiment Tree
651236	CDM compared output is not readable with some browsers due to Shift_JIS encoding. Solution:　Use Encoding UTF-8 for all HTML output.
651418	INCA hangs if special variable is selected in CDM, in case scalar 64 if the scale is at the limit
651507	INCA reloads EE and loses recorder settings even if nothing changed in CalculatedSignalsEditor
651978	INCA V7.3 SP3: .NET Framework installation popup appears while installing MDA 8. Note: Solved with MDA V8.5.4 part of INCA V7.3 SP4.
652068	INCA missing translation in ip Manager INFO box
652167	iLinkRT - High processor load when ASAP3.exe is started
652320	EE: Possibly getting wb([WBID306560295] DBString does not understand occurrencesOfSubstring:) when try to open EE
652321	CDM - Expand funktion - Click on the field containig the variable name: [WBID2906119779] UndefinedObject does not understand x
652324	CDM Multi Column View: When several variables are selected only the latest selected variable is listed in List Highlighted or Previewer
652546	XCPonCAN-FD Error message during initialisation: Error segment not valid
652587	INCA Calculated Signals window translation missing
652682	INCA-EIP: During Flash the following dialog appears in INCA-EIP. This dialog is missleading and should be removed, as it does not trigger any action in the Tool. An expicit power cycle is not needed anymore.
652694	INCA V7.3 Measurment Signals are not showed on the EE
652777	INCA Crash without message or WB --> measure data got lost
652984	INCA uses Contigent mode with Vector HW and Freischaltbit

653024	Porsche EKT-S20 Project: Display cannot be stopped with specific Experiment. Note: DBC file needs to be read again.
653109	DCM with header canntot be read in CDM with INCA
653250	PROF Convert.dll cannot deal with bracket generating short name. Recommendation: Put the filename in quotes to fix this:
653452	SOME IP Monitoring with ES886 or VN5640 : Reconnect after switching Device OFF and ON during Measurement does not work
653516	Online Help ETAS Network Manager outdated
653713	XETK-V2, XETK-S21 Unexpected raster check messages in INCA monitor each time the hardware is initialized
654069	INCA - ODX: INCA should not display the windows user name of imported ODX projects anymore
654314	CSM XCP Gateway 4s pro wrong time synchronisation in INCA. Note: Updated CSM Add-On required.
655211	Not possible to find IPETRONIK modules using BOA V2.28 (x86). Note: Solved with BOA V2.29 (x86)
655986	INCA-CANTransmit: Can not add LAB file in the DBC generator
656285	INCA uses old openSSL libs that can cause crashes on new PCs with Intel® 10th generation processor
656639	INCA-MCE: MCE License is in use if ASAP3 window is opened

5.14 INCA V7.3.3 HF1

5.14.1 Recommended Installation

See INCA V7.3.3

5.14.2 New Features and enhancements

See INCA V7.3.3

5.14.3 Known issues of INCA V7.3.3 – Important Hints

See INCA V7.3.3

5.14.4 Known issues solved with INCA V7.3.3 – Important Hints

See INCA V7.3.3

5.14.5 Bug Fixes and Improvements

See INCA V7.3.3, additionally these (duplicated) issues are solved:

EHI #	Title
650199	INCA V7.3: CRETA 5R3.4 64-bit Version: Get Dataset including CDFx file does not work
650249	INCA V7.3 - eCDM: Pulling CDFX files with meta data from CRETA into INCA fails with error *"Ensure that the AddOn supporting that format is installed".*

5.15   INCA V7.3.3

5.15.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is required.
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.

5.15.2   New Features and enhancements

- All news of the current INCA Service Pack see INCA-V7.3 SP3 Whats-new.pdf.
- J2534 support with INCA V7.3.

  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).

5.15.3   Known issues of INCA V7.3.3 – Important Hints

- #650352 INCA Add-On VoiceRecorder: Performance issue when stopping the measurement when the INCA Add-On VoiceRecorder is in use
  If INCA Add-On VoiceRecorder is used
    AND
  FlexRay - Monitoring is in the hardware configuration
    AND
  a measurement is recorded
    THEN
  with a very few experiments, the "Save File Dialog" may take a long time to open (up to approximately 5 Minutes have been reported)
  Workaround: Either remove FlexRay - Monitoring or VoiceRecorder from the hardware configuration.
  Affected INCA Version: INCA V7.3 SP3

- Important hint to new feature with INCA V7.3.1 *Ethernet/SOME_IP Monitoring on local network cards*
  INCA supports local network cards for Some/IP and Ethernet monitoring interface. To receive Jumbo frames or VLAN tagged frames additional network card specific setting could be needed. Network cards with not unique MAC address will be ignored (e.g. virtual network loop back adapter). Also network cards with DHCP IP address will be ignored.
  This feature prerequisites the manual installation of WinPcap V4.1.3. The installation is located in the INCA V7.3 Service Pack or DVD in folder **\Tools\WinPcap**

- #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
  INCA supports only the old "Channel-based mode(legacy)"

- 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.

5.15.4   Known issues solved with INCA V7.3.3 – Important Hints

- #649691 INCA V7.3.0 - MDF 4: INCA does not write the "vehicle name" in the measurement file as specified in the "Recording Save Dialog", but instead incorrectly writes the project name.
  Affected INCA Version: INCA V7.3.0 to V7.3.2

- #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.

5.15.5 Bug Fixes and Improvements

- Notes:
  - Some isssues 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
482208	ECU flashing is not possible due to second ECU connected to Flashport
492530	CAN-Monitoring with Option "One Measurement Raster per CAN ID" creates wrong data
540888	Assignment of a new raster for inactive measurements in the same measurement window is not supported
558770	Reuse Parts of EE: Different orders from the Recorders in VSD, DBBrowser, Manage Recorder and Recorder Configuration
570849	INCA-EIP Project with only Adaptive Characteristics does not allow to calibrate
590367	[WBID3967697697] UndefinedObject does not understand setClipMask:
592503	[WBID2700579632] UndefinedObject does not understand isManaged
598616	Walkback when opening experiment - [NetWBID323597965] System.ArgumentNullException: Value cannot be null.
598723	[WBID3808155175] UndefinedObject does not understand isDisableEERelevantChanges C:\Users\nf82si\AppData\Local\Temp\WBCheck\ ETAS\LogFiles\INCA\walkback\ur000032.wkb V7.2.6 Build 151/2 1
600009	[WBID1225706575] Unable to allocate device context.
600471	[WBID2333335189] UndefinedObject does not understand execWithProgressDialog:message:showProgress:title:
601124	INCA SubsetGenerator does not create A2L file and no possibility to change path if target folder or file is write protected
602493	[NetWBID689060332] System.NullReferenceException: Object reference not set to an instance of an object.
602824	KVL: Experiment order is not apearing for variables when user imports KVL from Version 1 lab file.
602835	Targetserver can not handle "/" instead of "\" in path name.

603540	EE: Possibly getting wb ([NetWBID1650268627] System.ArgumentOutOfRangeException: Index was out of range. Must be non-negative and less than the size of the collection.) after clicking into VSD in area of the Tabs
604710	Compu VTAB Range is not working for Measure calibration
607693	[WBID149381602] UndefinedObject does not understand allCalibrationAndAxisPointLabels
610307	VSD: 'Raster Pre-selection' raster selection is not retained for Grouped on VSD.
612655	EE: Unable to paste Hex value on Scale axis of Combined Editor.
613081	VSD: Text is garbled in advanced variable search filed
614395	[WBID864624044]UndefinedObject does not understand deleteOnTS:
616768	INCA ASAP3 not responding in case of ECU loss for 7 sec
617229	MDA V7.2 & INCA V7.2: Calculated signals not shown in MDA after using snapshot function. Note: Solved with MDA V8.5 and INCA V7.3 with MDF4.
618155	INCA does not export XYOsci into generated XDA configuration - If boolean measurement is used as axis in the XYOsci the XYOsci is not part XDA configuration
618978	Display of Recorders Events interrupts the EE - functionality
619082	[WBID1828434506] Exception in UI process + [WBID3402757492] UndefinedObject does not understand lockedColumns
620074	INCA crash at a2l assignment to ETK in case if UTF8 support is active in Windows Settings with [NetWBID3067522103] Etas.HWConfiguration.Framework.ErrorResultException: Parsing of ASAP2 file failed: Unknown exception occurred.
621038	[WBID1181318302] UndefinedObject does not understand getCustomerInstrumentsManager
621120	INCA crash after add demo ODX Project
622254	Raster fillig dialogue gets not refreshed
622529	INCA Working Point of calibation curve is not available in VSD calibration.output
623646	[WBID3738165505] Primitive failed in: Object>>#at: due to Index out of range in argument 1
625153	[NetWBID1971169032] System.InvalidOperationException: Element 'FuCorrnCalcn_ClsPosnSpMai_a[5]\ES910/Simulation Controller:1' with ID ID681521347 not found in input XML for VSD
628533	Slider Editor Range is false when selected from Display Configuration in the VSD
629744	Experiment variable automatic remap is ignoring second Ethernet device when only one is defined in the WP
629764	[WBID3329787912] UndefinedObject does not understand byteAt:
629997	Video AddOn - ONVIFX Camera credentials not being pulled from config file. Note: Solved with Video AddOn
630434	[WBID1122515093] (ExCLDTIndexOutOfRange) Index out of range
631141	INCA V7.2 and V7.3: Duration to reinitialize HW triggered in EE is very long (in case of huge experiments). Improved by factors.
631303	Mail address for INCA online feedback not valid
632460	User Options -> Experiment -> Calibration: There are no user options for Com Axis Editor
632684	Flat Fuction View does not work as expected
633778	DaisyChain: Caption of formula dialog incorrect and also look of GUI objects is strange
634130	INCA Experiment/ASAP3 measure values freeze on test bench, at the same time mdf-file still gets correct measure data

634475	Getting unexpected error message when tried to change Axis values.
634497	Getting Monotony has been violated error message at unexpected place in case of NAN (not a number). Solution: Monotony error message
635965	[WBID236536255] UndefinedObject does not understand at:ifAbsent:ifPresent:
636576	CDM multi column: [WBID1747106544](ExCLDTIndexOutOfRange) Index out of range.
636631	[WBID1166204626] (ExCLDTIndexOutOfRange) Index out of range. When in new view a function is extended and a cdfx file will be exchanged with another one
637067	Calculated Signals: Graph Configuration on Calc Signal Devendency Viewer: Radio button did not work as a toggle button
637357	ASAP3: Establish connection not possible after automatic disconnect : Error: Cannot bind Socket -> Close ASAP3 Interface needed
637361	Not possible to add single measurement elements of a 2 dim. measurement array to the EE
637370	INCA default and user comments are not saved correctly in MDF3 file
637576	INCA V7.2.16 and FETK-S1.1B: Error to delete ProF after flashing
637909	Calibration Map Copy and Paste failed
638286	INCA V7.3 - Oscilloscope: Wrap Around Curtain doesn't retain Axis Unit property value for label adIn0.
638292	BOA J2534OCD with VectorXL PassThruLibrary results in too long URI string
638705	ES584-LIN-Monitoring and -CAN-Monitoring: ES584-LIN Error 0x80001001: The parameters supplied to the function do not agree with each other on InitHW
638933	Read CSV with format error: [WBID1232881535] UndefinedObject does not understand addFunction:
639272	[WBID1358750300] Primitive failed in: RBLzssDLL32>>#UnzipFromMemory:srcBlockLen:unzippedBlock:unzippedBlockLen: due to General protection fault - write to invalid memory location
639866	Manual adaptation of Network setting does not work when using APIPA on a system which does not automatically store this information in the registry. Solution: Now this information from Windows APIs is used instead.
640428	FETK initialization fails in INCA due to string compare of two numerically identical values
640624	ASAP3 Log states wrong Windows OS entry
640724	Flickering screen when dragging widget in the experiment
641021	ASCII Label with certain content causes INCA system error: [WBID3334525453] IDispatch call returned an exception. ErrorCode: 0x80004005 Source: <unknown>. <LOCALIZED>Deserialization of base config >InputSignalConfig I14229_VehicleNum_CA
641115	INCA V7.3,2: Variables are not added to XY oscilloscope widget after making them active from inactive state.
641194	[WBID2385380392] (ExCLDTIndexOutOfRange) Undoing X-Axis Change on Curve
641298	Recording big data: Calibration events not included in restored MDF file after INCA crashes
641482	EE: Possibly Supporting Points Setup shows unexpected Bounds Message Box
641614	.NET Recorder Manager works not correctly if device name contains single quates
641861	ASAP3 options: String with space at wrong place causes issue in German translation.
641932	Drived Recorder: INCA does not save optimized DR export for V7.2. to default DR export directory
641975	DB: Getting WB([WBID4092838712] UndefinedObject does not understand copyFrom:to:) after export special environment in INCA 7 format
642137	DB: Wrong backup created when version 7 DB is opened using ComAPI

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642143	During changeing of database INCA shows an error message if a path contains multi-byte characters.
642287	EE: Possible that after conversion from Tab Editor to Comb Editor the value for Colum Width is not correct used
642381	INCA-XETK-S20 Out of Memory Error not propagating to user. Solution: Error message. But EE has to be adapted in such case as too large for the ETK.
642406	INCA V7.3.2: Performance "Close EE" decreased.
642530	Inline comparison doesn't work for characteristics at all in case of identical datasets with identic name
642993	Optimized download works with 512 bytes. Is it possible to chnage the block size to 1k or to other size? Yes, default for XCP was enhanced to 1k with INCA V7.3.3
642999	[WBID764030002] UndefinedObject does not understand doDelayedSingleShot:
643172	INCA V7.3: LogFile Path / Temp Path with multi-byte characters caused system down
643199	Copy and paste value from Excel to INCA did not work in case hidden names are used in the Excel sheet.
643343	MDFLib discrepancy between Big Endian and Little Endian values
643379	Export of experiment layers (.ee-files) exported in V7.3.x get refused to import in V7.2.x (in case format of .ee-file is 64 bit)
643681	ETK Tools V4.2.2 - Monitoring Variables values were not updated
643700	Open EE with a project: [WBID3421345940] UndefinedObject does not understand verticalResolution
643701	INCA does not allow a cluster calibration handle description to have a 'missing flash range' as compared to global handles
643714	INCA SIP: Typecast failed
644102	INCA V7.3 Calculated Signals: Type dropdown is not visible while editing Custom type calculated signal
644310	INCA wrong error message while reading not supported fibex file
644311	Irrelevant error message bei LIN configuration in 8xx-stack
644357	INCA Udate LED indicators makes ASAP3 unusable. Note: Function LED disabled completely.
644617	BR XETK: Sporadic IP address conflict after powering on all devices that is NOT resolved by IPManager
644772	INCA V7.3.2: Wrong info about CONSISTENCY_EVENT_LIST in Monitor
644880	[WBID4092838712] UndefinedObject does not understand copyFrom:to: when exporting to INCA 7 format
644894	EE files exported from 7.3 cannot be imported into 7.2 (if they are saved as as *.ee but are ee64-files)
644942	XCP: Adaptive parameter CURVE or MAP with STATIC_RECORD_LAYOUT does not show correct values after reconnect if axis point is added or removed
644956	EE Export/Import changing raster rate for Slew variable
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.
645101	EE: Possible to get WB([WBID4030254988] String does not understand exportExtension) after saving Recorded Measure File
645232	Hex Editor: Text not completely visible if Display Zoom Factor enhanced (>100%).
645399	Prof flash error for memory segment 14. Note: Solved with new programming file
645620	Missing German Translation in ETAS IP Manager
645712	CDM: If destination map has more x-axis than source not all available values for destination are shown
645842	API: send "StopAndDiscardRecording ()" -> INCA hangs up!

645845	Possible that for Working Point Calculation wrong Axis Points are marked in Combined Editor
646156	INCA-EIP License did not work. Note: New INCA-EIP license created after correction in ETAS License Portal (FNO).
646180	Calibration in DynEmu mode not working with full emulation when RP are different
646273	ASAP2 - Editor: Undo does not work correctly
646358	Flashing over CAN not possible while FETK not available
646378	Signals of a certain slot are not visible in FlexRay-Monitoring. Note: AUTOSAR file corrected/updated.
646496	VSD Raster Pre-Selection Dialog - switching between 'All Sources' and single device in source tree leads to [NetWBID1561011107] System.ArgumentOutOfRangeException: Index was out of range. Must be non-negative and less than the size of the collection.
646698	CDM Multi Column Mulit select does not work
646699	TI CDM-Multi Column: Inline compare editor pops up during selection of several lables
646702	Edit Application History entries for Multi Select in CDM Multi Column view does not work
646980	ES820: INCA V7.3.2 crashes during DR Export
647006	Calculated Signals: Critical exception when trying to add a new custom signal with name '0' and value (const) 0
647100	FlexRay: Buffered Controller Configuration is not updated under specific conditions
647396	Variables acquisition via timers with XETK-S20 and XETK-S30 not working with current a2l file
647774	[WBID1166204626] (ExCLDTIndexOutOfRange) Index out of range.: 1
647775	EE: After reopen from new saved EE, recording works not any longer
647790	MultiECUCluster: Page Switch reactivated for grouped ECU devices which should not allow page switch
647880	[WBID599166111] (ExCLDTIndexOutOfRange) Index out of range.: 1
648157	Calculated Signals: Fixed raster for calculated signal is reset from 1 to „like signal" on edit
648286	If writing Device Information is active, the recorded mf4 file contains <list> elements with missing 'name' attribute (not readable in Famos)
648658	CAN-Trace-AddOn: CAN traces from INCA are not plausible. Note: Solved with CAN-Trace-AddOn
649002	ETK Tools: ETK Tool V4.2.3 Beta is not opening
649141	CAN-Trace-AddOn: CAN trace from INCA is not consitent. Note: Solved with CAN-Trace-AddOn V7.3.3
649192	Lookup Generator has wrong path to perl exe
649458	INCA V7.3.3 Beta: INCA Vector HW: New licensed addon will always be installed with INCA. Note: New (optional) INCA AddOn Vector-Hardware V7.3.3 available.
649515	INCA freezes by stop the measurement if INCA Add-On VoiceRecorder is in use
649691	INCA V7.3.0 - MDF 4: INCA does not write the "vehicle name" in the measurement file as specified in the "Recording Save Dialog", but instead incorrectly writes the project name.

5.16   INCA V7.3.2

5.16.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

Important: After the installation, a reboot of the computer system is required.
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.

5.16.2   New Features and enhancements

- All news of the current INCA Service Pack see INCA-V7.3 SP2 Whats-new.pdf.

- ES4xx – Import of channel parameters using a csv file
  Configuring many channels for ES4xx devices can be done at once
    - CSV files are used to define content
    - New devices are added to the hardware configuration
    - Existing devices are modified
    - Device name, serial number or alias name used to identify device
    - Supported devices: ES410, ES411, ES413, ES415, ES420, ES421
  A detailed description is available in **Documentation → Manuals → INCA_V7.3_ImportMeasurementScheme_CSV_EN.pdf** (Update 3/2021: Description is now available in the online help)

- Experiment Environment: Improved Error Handling in case of customer specific instrument plugin (for the Experiment Environment) caused a non-handled exception (error) - e.g. like reported in Call *#592270 [WBID1631460624] Primitive failed in: PlatformFunction>>#callWith: due to General protection fault - read from invalid memory location - in case of an non-handled exception of an instrument plugin.*
  In case of such an error of the instrument plugin, INCA catches the exception and disables the instrument. In such case, the instrument has to be checked.

- Extension of INCA Tool-API to solve call *#627241 API: ReadFromExRAM (long start, long length): Address overflow on COM API memory read attempt.*
  Solved with new API: public virtual sbyte[] ReadFromExRAM32(uint start, uint length). Details see INCA Tool-API Documentation.

- ProF: GET_STRING_FILE extended to solve *#640655 ETK Upload as ASCII String not possible in ProF.*
  Problem:
  Bytes retrieved e.g. from an ECU with any ProF command (e.g. ETK_UPLOAD) shall be interpreted as ASCII string and printed into the ProF window during flashing.
  Solution:
  Write the bytes into a file and then use the newly enhanced ProF command GET_STRING_FILE() to read the data from the file in ASCII format and store it in '%s' for usage in other commands like DISPLAY_MESSAGE().

- J2534 support with INCA V7.3.

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

5.16.3   Known issues of INCA V7.3.2 – Important Hints

* Important hint to new feature with INCA V7.3.1 *Ethernet/SOME_IP Monitoring on local network cards*
INCA supports local network cards for Some/IP and Ethernet monitoring interface. To receive Jumbo frames or VLAN tagged frames additional network card specific setting could be needed. Network cards with not unique MAC address will be ignored (e.g. virtual network loop back adapter). Also network cards with DHCP IP address will be ignored.
This feature prerequisites the manual installation of WinPcap V4.1.3. The installation is located in the INCA V7.3 Service Pack or DVD in folder **\Tools\WinPcap**

* #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
INCA supports only the old "Channel-based mode(legacy)"

* 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.

5.16.4   Known issues solved with INCA V7.3.2 – Important Hints

* NA

Template: 00TE00156 V05 – released

5.16.5 Bug Fixes and Improvements

- Notes:
  - Some isssues 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
355741	DBB: It is possible to get a behavior that a device cannot be changed in DBB
470674	Calibration access without matching checksum
553032	EE KVL: "[WBID145438330] Primitive failed in: ByteArray>>#uint32At:put: due to Value out of range in argument 2" can occur when loading KVL in EE
560436	CDM: Update from Master because of Read Only state does not work when CDM is opened via EE
581786	No clear message apperas by adding a buffered dataset
581855	Old CDM config creates path in file system
583944	UserOptions: First user variable's value are populated for empty values for variables of second user.
584596	INCA Could not export when DCM-file is not available
587633	[NetWBID888615563] System.InvalidOperationException: Sequence contains no elements
589244	Different behaviour between calibration table and calibration window
590329	Loading an empty experiment takes very long
592081	CDM: Possible that Headline from CDM is not correct updated when using QMD-Variables for File Name
592270	[WBID1631460624] Primitive failed in: PlatformFunction>>#callWith: due to General protection fault - read from invalid memory location - in case of an non-handled exception of an instrument plugin
593927	[NetWBID3651829353] System.InvalidOperationException: No support of simultaneous revokes + [WBID965162006] IDispatch call returned an exception. ErrorCode: 0x80131600 Source: Etas.Base.Shared. ExceptionInDotNETCOMServer_KeyWord - NetWBID3651829353
597591	Osci V7.1 signal list lower part of the characters are not displayed correctly in case scaling of display higher than 100% is used
609279	[WBID499694038] DBLookupTable does not understand getLibrary
610227	[WBID306560295] MCSNameObject does not understand indices
612693	EE: Wrong X axis values appear '-' instead of 0,1,2,3 in Combined Editor.
618640	[WBID836427402]MCSMainCtrl does not understand acquisitionManager
618956	Cannot open MDF4 measure files with MDA V7 or V8 from INCA DBB or EE & File format selection is not persisted
619287	CDM Multi Column: Right click should select underlaying cell
619567	ASAP2: Different values copied in Clipboard when copied from Menu and copied from Editor in ASAP2 Editor
619729	API: It is possible to set identical Name to HW System/Device in HWC, though the same is not allowed manually
623233	ASAP3 option "Use hard bound limitation" works inconsistent
623780	CDM: Rounding/Quantization works not correct
624130	When the Advanced Code Check fails the "Continue" button should open directly the MPM

624440	CDM: Connection to ASAP2-project not possible
625208	Not possible to safe MDF4 - file, in case user tries to safe the date in a locked MDF4 - file (e.g. by MDA) - file dialog/handling enhancements.
625515	Impossible to download WP when EE is open. Note: Solved with INTECRIO V4.7.2.
626144	ETKC, HWC: When assigning a project the parameters are reset to the standard values
626208	MCE: It is possible to remove MCE variables from remote operation (e.g. ASAP3) before the session is terminated
626788	The values of one MAP can not be reverted from RP
627087	ASAP3: Command "Get Measurement Info" crashed the ASAP3.exe with measurementlable sword_2d_row_[0][0]
627123	ES886: Ethernet Monitoring is not possible. Note: Already solved with INCA V7.2.15.
627241	API: ReadFromExRAM (long start, long length): Address overflow on COM API memory read attempt. Solved with new API: public virtual sbyte[] ReadFromExRAM32(uint start, uint length). Details see INCA Tool-API Documentation.
628226	No clear error message if no free capacity is available for measure file saving
628955	Rendering issues after the resizing of toolbars
628987	[WBID319742575] UndefinedObject does not understand isEmpty when compare via CDM
630842	MCE: Wrong signal is deleted from MCE variables list - in case Sorting is active
630884	BR_XETK-S2 : Flashing with the new Prof Flow results in error.
631467	INCA V7.3.0: Performance to close EE is slower compared to INCA 7.2.16
631646	DCM: Unprecise time information in CDM progress info dialog
632629	INCA V7.3.0: Inconsistency in File Save Dialog of Export Files (EE / VUI parts)
632679	Drive Recorder Export Dialog displays incorrect extension
632888	If INCA is started as "admin" then all shares from network are not available. Recommendation: Set [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\ Windows\CurrentVersion\Policies\System] "EnableLinkedConnections"=dword:00000001
632895	ODX: Opening an Osci also opens DataLogging GUI
633104	Read calibration from file via EE doesn't work if Japanese characters are included
633229	Extended Device Type Identifier for ES160 are not working in INCA /SET Alias Name does not work
633233	Diplay dataset name / path better in switch view - mouse-over pop-up for the dataset name
633350	Optimized upload for XCP and CCP improved if ECU supports CRC checksum
633718	API: GetExperimentElementForCaseInsensitiveLabel Method does not work for Virtual devices
634078	INCA V7.3.1: Update of Alias Name is not working for network interface cards. It does not display the changed name.
634657	Calculated Signals "Available Signals" window title is missing. Observed while importing calculated signals from file.
634858	INCA converts DB to wrong folder when / is at the end of DB_Path in userdef.ini
635315	Save measurement files to USB memory: Same warning as necessary when saving to network path.
635472	CDM inline editor shows no Longname
635787	INCA Osci is visualised in another layer after searching variable with layer switch
635965	[WBID236536255] UndefinedObject does not understand at:ifAbsent:ifPresent:

636122	Values from 64 Bit integer signals wrongly displayed (with a leading zero) on the y-axis of the oscilloscope.
636188	EE: Possible that Calibration Label is only added in state Read Only to EE using User Option: Experiment -> Calibration -> Calibration Recording = Yes
636470	INCA V7.3.1: Performance EE Open from DB and Cancel is slower as compared to former version
636970	DB: INCA is crashing when try to open special DB with huge items
636995	Conversion of vtab signal does not work for dxl
637012	COM API: OpenNewCalibrationScenarioConfiguration does not work when EE was opened via Com API
637067	Calculated Signals: Graph Configuration on Calc Signal Devendency Viewer: Radio button did not work as a toggle button
637077	Tooltip text of some buttons is wrong
637078	INCA V7.3 The import filter option text for .ee-files to import exported layers is missing in the dropdown menu.
637194	[WBID2865036150]UndefinedObject does not understand setModified
637295	INCA-EIP: After flashing a data set to a hardware device, model execution (of a older model) may start automatically. Recommendation: Re-build the model with at least INTECRIO V4.7.0 or INTECRIO-RLINK V1.5.0.
637424	Target Server freezes during an overnight test with a call stack for a1b_XETK.dll 0x0ac59475
637763	Default Recording Setting in Demo DB are not user friendly hard coded.
637804	Inca 7.3.0 und 32bit ProF DLL ProF error: Wrong parameter calling fverify.dll - Warning: "... A 32-bit DLL is called from a 64-bit process"
638227	CDM: Warning for overwriting the file appears wrongly in case folder and file are not existing
638289	INCA Osci is lagging after switching through some Layer
638291	INCA V7.3.1 INCA AddOn-DriveRecorder unable to open Drive Recorder Configurator
638343	Initialization of documents fails while opening Variable Documentation
638572	ETAS License Manager: License cannot be returned, if the license file was removed as long as any license is borrowed. Improved error message.
638751	INCA Add-On ODX V7.3.1: Walkback when initializing a UDS device without A2L. [WBID2582491549] UndefinedObject does not understand a2lFileName
638792	INCA process hangs when importing AUTOSAR file
639124	Quantification does not work for CDFX connected to ASAP2 project
639349	CDM: [WBID2803963921] UndefinedObject does not understand contents:
639394	OHI definition for a single-instance host interface, avoiding spurious "port number" specifier in CSI URI
639457	INCA 7.3 - ASAP3 execution stops with messagebox
639685	INCA7.3 PROF Checksum together with RequestTransferExit
639855	Pictures were not known in the help "Overview of Variable Selection Dialog" in case of Japanese language
639859	Recording Delay while changing Memory Page to Working Page
639878	HWDevice SetName Method not triggering HWI DK API for Camera Device Naming
639888	LERT FlashRange CM with intersecting flash ranges is not accepted
640311	INCA V7.3: Calculated Signals -> Custom -> No line break in Description
640555	INCA V7.3 error message: 32-Bit DLL called from 64-Bit process, when installing Prof with dll´s in [ChangePath] - and DLL changed. Solutsion: Exclude *.dll (and *.exe) from the $prof-pattern recognition and replacement.

640596	INCA Add-On ODX V7.3.2: Walkback when initializing a UDS device without A2L. [WBID2582491549] ASAP2DBProject does not understand a2lFileName
640616	Caluclated signals -> Import -> Signals not selected
640617	Calculated Signals -> View Dependencies -> Window size cannot be changed (to small)
640618	Calculated Signals -> View Dependencies -> Graphics disappear after editing a signal
640655	ETK Upload as ASCII String not possible in ProF. GET_STRING_FILE extended. Details see section "New Features and enhancements"
640723	IPM-NetworkManager of Version 17 and 18 changes will not be overtaken. Note: Solved with HSP V12.2.0
640731	WB when assign an arxml-file to FLX-Mon: [WBID3266805723] UndefinedObject does not understand isEmpty
640934	MAX_CTO smaller than (MAX_FLX_LEN_BUF - Header) leads to not received ECU response
641160	INCA ODX: Size of OBD-UI can't be reduced
641261	INCA does only for Ethernet Host Interfaces display the used communication channel in the HWC
641798	Replace a system ES5xx to a system ES8xx the HWC HW tree collaps
642290	INCA crashes during API-communication [WBID2209875786] UndefinedObject does not understand at:ifAbsent:ifPresent:
642309	Press VSD button might cause [NetWBID2791395256] System.InvalidOperationException: Experiment xml description did not pass the validation against the xml schema. Note: The experiment has to be repaired.
642540	Calibration Rewrite speed : INCA 7.3 Win 10 was slower than INCA 7.2 Win7

5.17   INCA V7.3.1

5.17.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

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

5.17.2   New Features and enhancements

- All news of the current INCA Service Pack see INCA-V7.3 SP1 Whats-new.pdf.

- For more information see also INCA-V7.3-Introduction.pdf about native INCA V7.3 64-bit support, INCA V7.3 64bit Data Base, supported Operating Systems, consolidation of INCA Add-Ons, INCA Interfaces and phased out hardware and software.

- J2534 support with INCA V7.3 SP1.

  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.

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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 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)

This behavior is subject to change in future INCA V7.3 versions.

- Ethernet/SOME_IP Monitoring on local network cards
INCA supports local network cards for Some/IP and Ethernet monitoring interface. To receive Jumbo frames or VLAN tagged frames additional network card specific setting could be needed. Network cards with not unique MAC address will be ignored (e.g. virtual network loop back adapter). Also network cards with DHCP IP address will be ignored.
This feature prerequisites the manual installation of WinPcap V4.1.3. The installation is located in the INCA V7.3 Service Pack or DVD in folder **\Tools\WinPcap**

5.17.3   Known issues of INCA V7.3.1 – Important Hints

- Performance and memory consumption with the INCA V7.3 64 bit system
Due to the migration to 64bit, the memory consumption might increase in some use cases, depending on configuration (projects and experiments).
- Installation: When the required packages of redistributables or .NET are not installed before the INCA V7.3 Service Pack, a reboot might be necessary.
- INCA V7.3 64 bit COM-API
    o   Clients which are compiled for .NET x86 (32bit) are not supported
    o   It is necessary that .NET clients are compiled for x64.
- INCA-MIP V7.3: MATLAB® 32bit versions are no longer supported with the INCA V7.3 - 64bit version.
- #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
INCA supports only the old "Channel-based mode(legacy)"
- #627397 INCA V7.2: No linear formula in INCA for AUTOSAR files V3.2.2
Autosar 3.2 is not supported anymore with INCA V7.3 but AUTOSAR 4.x.
- Known issue with new feature *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.

5.17.4 Known issues solved with INCA V7.3.1 – Important Hints

- J2534 support is not part of INCA V7.3 SP0.
- INCA Add-On ODX is not part of INCA V7.3 SP0.
- INCA V7.3 Data base export to INCA V7.2 is not supported with INCA V7.3.0.
- Performance and memory consumption with the INCA V7.3 64 bit system
  All relevant known issues improved with INCA V7.3.1.
  - o Due to the migration to 64bit, the memory consumption might increase in some use cases, depending on configuration (projects and experiments). Note: Some use cases improved with INCA V7.3.1. Not all possible.
  - o Performance of some actions may decrease:
    - ▪ Duration of HW (re-)initialization and open EE might increase, e.g. due to
      - MCE Add-On installed,
      - huge amount Calibration Recording items used,
    - ▪ open and close EE
    - ▪ import of huge INCA export files (.EXP)
  - o some CDM actions.
- Calculated Signals: Some customer defined calculated signals might be not supported, especially on 2-byte character languages (operating systems).
- Flashing of some customer specific ProF configurations might not work.
- #634016 ProF ECU flashing with XETK/FETK (including dmETK in FETK mode) fails in case of an inconsistent device configuration for XCP target access.
   If
INCA V7.2.16 or INCA V7.3.0 is used for ProF ECU flashing
   AND
the XETK or FETK or dmETK in FETK mode are used
   AND
the ProF-Flow contains the command ETK_FPRG_COMMAND
with following command parameters param1=3, param2=4, param3=7
   AND
the according memory area for the XCP based 32Bit memory access is not configured for the device (A2L, ProF device hardware reconfiguration)
   THEN
flashing will fail.

Affected INCA Versions: INCA V7.2.16 and INCA V7.3.0
Note: All ETKs are **not** affected.

This was a side effect from
#631750 FETK/XETK: Disable Watchdog impossible because current INCA does not support to write to SPI Register via ProF script
introduced with INCA V7.2.16 and INCA V7.3.0

This change was reverted. Solution of #631750 is planned by adaptation of the ProF Skript.

- #636459 Calculated Signal RSFlipFlop shows wrong values
If more than one RSFlipFlop is used in *Calculated Signals* the result is getting wrong. Independent if more than one RSFlipFlops are used in one "Set" or in different "Sets".
Affected INCA Versions: All versions supporting RSFlipFlop.

5.17.5   Bug Fixes and Improvements

- Notes:
    - Some fixes 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
593228	[NetWBID3590868967] System.NullReferenceException: Object reference not set to an instance of an object.
603697	Performance Issue when opening experiment with INCA V7.2 (increase of 30% first time opening the experiment and 79% second time opening the experiment)
605205	Arxml2A2l: Controller with the same short name are not selectable in HWC
609926	[WBID2840447704] IDispatch call returned an exception. ErrorCode: 0x80131600 Source: Etas.Base.Shared. ExceptionInDotNETCOMServer_KeyWord - NetWBID1971169032
611188	[NetWBID368410299] System.ArgumentException: File format is not valid.
612474	[WBID3416515380]String does not understand between:and:
615707	[NetWBID3651829353] System.InvalidOperationException: No support of simultaneous revokes.
616210	INCA-CANTransmit: DBC Generator generated .net error
619529	INCA shows more signals in the VSD than CANape ==> Signals with no start position in the Autosar file are configured with start position 0 by default
619853	[WBID849423436] Abt.Nls.160.e: Conversion from code page 65001 to code page 819 is not supported - in case, the A2L contains no memory segments.
622409	INCA-SIP: Improvement of ECU Configuration UI
623690	Switching view when "CDM label viewer" is open leads to [WBID334007782] UndefinedObject does not understand mdiFrame. Note: Solved with INCA V7.2.15 and higher.
623769	After InitializeHardware is called from HWC Object recording does no more work
624350	INCA crashes when the open EE where closed during CAN DB generator is still open - [WBID3014711700] UndefinedObject does not understand multiRecorderFassade
624768	[WBID3040087547] Point does not understand collect: Occurs while performing Inline Compare operation on destination Dataset.
624981	[WBID1792865273] UndefinedObject does not understand getReferencedAxisPts
625975	CDM_path to write a file not valid
626726	Error message by HW init sporadically
626899	MDA8 not automatically displays INCA-EIP device data in Osci (from an INCA XDA). Note: Solved with INCA V7.3 SP1
627042	[WBID306560295] MCSCalibrationManager does not understand shell
627244	FETK device selection parameter resetting to default when change dataset

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627246	CDM crash with WB during copying variable from dcm to dataset sporadically: [WBID3393061088] UndefinedObject does not understand calibrationObject
628288	VUI_ Slider Editor_font size of variable name and value not plausible
628870	INCA-Touch: Recorde/Measure did not stop via INCA-TOUCH with multi-byte character in measure file path
630042	Return code of PUT LOOKUP TABLE does not match
630168	INCA V7.3.0 cannot import big size (190MB) EXP-file created from INCA V7.2
630443	ASAP3: Adjustment action "PUT LOOKUP TABLE TO AP-S" sets incorrect values
630622	Error message due to not compatible autosar file improved
630679	Several Shortcut ALT + key leads to unintended set of a Bit in Bitmask Widget
630699	CDM_ after "Connection to ASAP2 project" of file wrong compare result
630781	Text fields in VUI Font size changed after display scaling
630784	[WBID1023706050] (ExCPMStackOverflow) A stack overflow has occurred / or system freeze with large walk back file
631145	ServicePackInstaller: Current Action, Status or Hint Line should be more prominent
631269	INCA wrong resizing of value field and updown control in calibration window with silder editor and display unit activated
631347	ComReg --unreg should unregister all detected IPManager versions
631382	INCA takes Offline_Cal into consideration where it shouldn't
631411	[WBID4124600163] (ExCPMStackOverflow) A stack overflow has occurred.
631412	INCA creates wrong name for EIP-signals with ES830
631433	Initialize Hardware in INCA with two different ECUs: [WBID2204554262] (ExCLDTInvalidArgument) Invalid argument.
631446	ASAP2 : "[WBID1881728435] Exception is not resumable" occurs in ASAP2Editor while Clicking the "Values" Tab
631555	ES6xx: Pasting wrong data when copying from another channel in ES6xx hwc
631574	INCA V7.3.0 Performance VSD Close is slower by 50% in INCA 7.3 as compared to 7.2.16
631609	INCA Monitor: Missing device name in error messages
631641	INCA V7.3.0: Performance HW Initialize is slower in INCA 7.3 compared to INCA V7.2
631781	Measure file after snapshot not usable in MDA V8.4.1
631918	INCA-Touch: Measured value and scale have different decimal alignment
631946	[WBID3272217033] EINVAL (22) Invalid argument : Walkback when parsing converted Autosar file from BMW
632458	VSD: Changing the 'Representation' in 'Combined matrix editor' user option is not reflected in Display Configuration
632467	[WBID1391715928]UndefinedObject does not understand projectAccessDeviceClass - when the following API call is executed: IncaDataBase myActualDataBase = oINCA.GetCurrentDataBase();
632510	CDM: INI files generated from CDM are not saved with the proper data. When reloaded, CDM shows wrong data
632668	Performance DB: Read A2L and Hex is slower by 20% in INCA V7.3.0 compared to V7.2.16
632689	[WBID2249994343] True does not understand firstOrNil - due to not supported file format. Solution: Error message.
632998	When editing Custom Calc Signal, error was shown
633127	Walkback at ARXML FLX_Cluster import: [WBID3137195360] UndefinedObject does not understand writeTempFile
633290	ProF name is not visible in the Path Select Dialog

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633408	DaisyChain: DaisyChain GUI update of tree view and table view does not match e.g. after "download configuration"
633425	Calculated Signals: Adding Constants while creating "Custom - Const" Calculated Signals is not successful
633448	INCA 7.3.0: [WBID3038385942] String does not understand asBytes - when starting recording via API
633707	INCA deleting Arrays out of VUI´s if INDEX Alingment is changed
633722	CDM: WB duing CDM copy action. [WBID2181148066] Store into read-only object.
633832	Walkback if Import INCA 7.2 .exp file: [WBID1600186427] UndefinedObject does not understand not
633884	[WBID3271921605] Primitive failed in: EsAtom>>#replaceFrom:to:with:startingAt: due to Invalid class in argument 3
633989	INCA-SIP: "Simulation Device" visible for different bus types
634016	ProF ECU flashing with XETK/FETK (including dmETK in FETK mode) fails in case of an inconsistent device configuration for XCP target access. Consequently also disabling the MCU Software Watchdog Timers failed.
634104	INCA-MIP V7.3.0 Manual: Path to MIP folder was not updated to 64-bit Version
634113	INCA-MIP V7.3.0: Demo Database is missing after installation
634524	UFE button greyed-out when Non-UFE controller on top of HW config hierarchy tree
634722	INCA_does not read a2l (generated by DAMOS++) with unused COMPU_VTAB when NumberValuePairs is 0
634877	[WBID849423436] Abt.Nls.160.e: Conversion from code page 65001 to code page 819 is not supported - in case, the A2L contains no memory segments.
635280	XETK/FETK and only Distab17: Variables can be selected only in a certain order
635308	[WBID2021639509] String does not understand asBytes
635311	[WBID2021639509] String does not understand asBytes
635469	Cuboid: Hard bounds exceeded when copying a CDFx or dataset into a dataset
635740	[NetWBID3544567579] System.FormatException: Der Formatbezeichner war ungültig.
635897	Seed&Key DLL error
636083	INCA calculated Signal dialog is not diplayed correctly
636097	ServicePackInstaller: NLS - column "comments" not translated to German
636105	INCA - ES886 - Ethernet Monitoring: Critical Exception after swtiching HW off, once ES886-Ethernet Monitoring was initialized
636309	CDM Copy data and QM-Basic entry from cdfx-file to dataset, then in the standard copy history entry the source is missing
636351	INCA V7.3.0 Calculated Signal: Not possible to create a calculated signal for devices with German characters (Umlaute)
636459	Calculated Signal RSFlipFlop shows wrong values
636552	INCA V7.3.0: Unable to replace the 'Measured signal' for already defined and saved calculated signal.
636796	INCA is crashing on hardware init: [WBID770159079] EtasGenericHWItemSystemVersion3 does not understand key
636848	INCA Prof SeednKey.dll is not working with INCA V7.3.0
637373	INCA V7.3.1 Beta: INCA Block addresses for bigdata att in MDF4.1 measure file not multiple of 8 bytes
637954	DaisyChain: DaisyChain GUI update of tree view and table view does not match e.g. after "download configuration"

5.18   INCA V7.3.0

5.18.1   Recommended Installation

It is strongly recommended to update and down date INCA V7.3 (including INCA Add-Ons) only with help of the INCA Service Pack Installer.

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

5.18.2   New Features and enhancements

- All news of the current INCA Service Pack see INCA-V7.3 Whats-new.pdf.

- Read more in INCA-V7.3-Introduction.pdf about native INCA V7.3 64-bit support, INCA V7.3 64bit Data Base, supported Operating Systems, consolidation of INCA Add-Ons, INCA Interfaces and phased out hardware and software.

- #631750 FETK/XETK: Disable Watchdog impossible because current INCA does not support to write to SPI Register via ProF script
  INCA V7.3.0 and higher supports now 32 bit write accesses to the ECU memory via the ProF script.
  This can be used e.g. to write to SPI register in order to disable the ECU watchdog in preparation for ECU flashing.
  Addendum April 21, 2020: Reverted with INCA V7.3.1. See "*Known issues solved with INCA V7.3.1 - Important Hints*".

5.18.3   Known issues of INCA V7.3.0 – Important Hints

- INCA Add-On ODX and J2534 support are not part of INCA V7.3 SP0. Both are planned with one of the upcoming INCA V7.3 Service Packs.

- INCA V7.3 Data base export to INCA V7.2 is not supported with INCA V7.3.0. It is planned to enable it with INCA V7.3.1.

- Performance and memory consumption with the INCA V7.3 64 bit system
  - Due to the migration to 64bit, the memory consumption might increase in some use cases, depending on configuration (projects and experiments).
  - Performance of some actions may decrease:
    - Duration of HW (re-)initialization and open EE might increase, e.g. due to
      - MCE Add-On installed,
      - huge amount Calibration Recording items used,
    - open and close EE
    - import of huge INCA export files (.EXP)
    - some CDM actions.
- Installation: When the required packages of redistributables or .NET are not installed before the INCA V7.3 Service Pack, a reboot might be necessary.
- Calculated Signals: Some customer defined calculated signals might be not supported, especially on 2-byte character languages (operating systems).
- Flashing of some customer specific ProF configurations might not work.
- INCA V7.3 64 bit COM-API
  - Clients which are compiled for .NET x86 (32bit) are not supported

- o It is necessary that .NET clients are compiled for x64.
- INCA-MIP V7.3: MATLAB® 32bit versions are no longer supported with the INCA V7.3 - 64bit version.
- #631738 INCA does not support VN5610 and VN5640 with new driver mode "network-based mode"
INCA supports only the old "Channel-based mode(legacy)"
- #627397 INCA V7.2: No linear formula in INCA for AUTOSAR files V3.2.2
Autosar 3.2 is not supported anymore with INCA V7.3 but AUTOSAR 4.x.
- Known issue with new feature *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.

5.18.4 Known issues solved with INCA V7.3.0 – Important Hints

- #631013 CDM writes sometimes unexpected values during CDM listing to the data exchange file (e.g. DCM, CDF, PaCo, CVX)
    IF
CDM is used in parallel to INCA-Experimental Environment (INCA-EE) with running measurement or recording
    AND
CDM Listing-, CDM Compare- or CDM Copy-action is executed
    THEN
it is possible that the result contains wrong values, which are displayed or written to the data exchange file.

    Notes: INCA V7.0 up to INCA V7.2.15 is affected.
Appearance of the issue is more likely, the more items in the EE are displayed and updated in parallel to the CDM action.

    Workaround: Stop the measurement or recording in the INCA-EE and then execute the CDM-actions
OR
Write the "data exchange file" directly from INCA-EE without CDM.
- #597666 Possible data loss with ES4xx devices in case of high load situations (e.g. high data rates) AND a second network card connected to the company network
Solved with INCA V7.2.16 and INCA V7.3.0.
Nevertheless, it is recommended to switch the company network off, to avoid data loss in case of high data rates. Such data loss might be caused by some repetitive computer management tasks (e.g. by IT departments) which are scheduled when

the computer is connected to a company network.
Known issue: Data loss will still occur with Intel® Gigabit-CT-Desktop-Adapter; Product Code: EXPI9301CTBLK or EXPI9301CT. In case it is recommended to exchange it. ETAS released this fix with Delock PCI Express Karte > 1 x Gigabit LAN; Item No: 89156 (https://www.delock.de)

- #625918 WB in CDM "Multi-column" when moving columns: [WBID34407603] UndefinedObject does not understand longName
  If you use CDM in Multi Column View
     AND
  you select a column by clicking to the column title
     AND
  you move the selected column to a value field inside CDM
     THEN
  a WB may occur
  To avoid the problem do not try to move the columns of the multi column view in CDM

- 603992 Recorded CHARACTERISTIC value is always set "0" if "Calibration Recording" with MDF3 is used with a BIT_MASK and BIT_MASK is not set on LSB (0001) but higher Bits (e.g. 0010).
     If
  MDF3 for Calibration Recording is used
     AND
  BIT_MASK is used for Calibration with CHARACTERISTIC
     AND
  the bitmask is not set to the LSB (*least significant bit*) but a higher bit position
     THEN
  the recorded value of the Calibarion is always zero (0).
  Note: Calibration works correctly.
  Workaround:
  - Use MDF 4.
  - Workaround for MDF3: Use an "outputsignal" for recording the calibration.

5.18.5   Bug Fixes and Improvements

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

EHI #	Title
532158	INCA Installation: EULA Agreement can not be confirmed on Resolution 2730x1824 with Font 200%
579605	EE: "[WBID595466429] IDispatch call returned an exception. ErrorCode: 0x80004005 Source: <unknown>. <LOCALIZED>MdfLib:: Unknown exception" can occur during recording
584050	No polling signal can add into experiment once Project base address isn't equal 0
585274	ASAP2Ed: Possible that after leaving Weak Bounds Upper or Lower with Tab Key the value is changed

596555	EE takes 5 minutes to open when a lab file with 56000 labels is added in VSD. Note: Improved to less than 5 Seconds with INCA V7.3.0
596557	Adding a lab file in VSD with 56000 labels takes 5 mins. Note: Improved to less than 10 Seconds with INCA V7.3.0.
596905	[WBID3155437212] RBVUIMoveAndScaleWrapperWithText does not understand storageVUIObject:
597666	Possible data loss with ES4xx devices in case of high load situations (e.g. high data rates) AND a second network card connected to the company network. Solved with INCA V7.2.16 and INCA V7.3.0.
603528	[WBID1420769584] EIO (5) I/O error [53]
603992	Recorded CHARACTERISTIC value is always set "0" if "Calibration Recording" with MDF3 is used with a BIT_MASK and BIT_MASK is not set on LSB (0001) but higher Bits (e.g. 0010).
608983	No possible to see which lables from the Lab-file was not taken in an experiment
610009	[WBID1813346873] IDispatch call returned an exception. ErrorCode: 0x80131600 Source: Etas.Base.Shared. ExceptionInDotNETCOMServer_KeyWord - NetWBID1971169032
612081	EE: Monotony error message appears twice.
612171	EE: Undo leads to different results for special Matrix dependent on the selected cells (values)
615704	MDF format switching is not successfully executed by API
615901	MDA8 : Table instruments does not displayed properly of multi bytes message. Note: Solved with INCA V7.3.0
616858	Missing data values have been detected during measurement
616896	[WBID3523642367] UndefinedObject does not understand tabList
617694	EE: Drag & Drop from label using Combined Editor into CSE leads to effect that Combined Editor shows more than the selected label
619161	[NetWBID3703246127] System.NullReferenceException: Der Objektverweis wurde nicht auf eine Objektinstanz festgelegt.
619470	Using of Display_Indentifier leads to manual trigger after reloding the EE
620513	[WBID1201862911] + [NetWBID1584879455] System.Runtime.InteropServices.InvalidComObjectException: COM object that has been separated from its underlying RCW cannot be used.
621369	ES4xx devices lost channel information.
621384	INCA options are not correct after change of user profile
621775	CDM: Multi Column CDM shows also Inline Editor if last label was removed from List
621777	CDM: WB([WBID1256181380] Primitive failed in: Object>>#at: due to Index out of range in argument 1) when type in Character in Multi Column CDM List without selected Label
621911	[WBID3084758410] UndefinedObject does not understand input
622021	CDM Multi Column: Select/Deselect all does not work.
622028	INCA-EIP calibration editor hanging
623103	WP is downloaded completely instead just of the differences
623851	XCP upload fails if hex file contains only data
623945	INCA shall provide correct Japanese encoding information in xda file header
624236	CDM crashes when open a label with [WBID5506419] UndefinedObject does not understand deferRedraw:
624242	CDM - opened label is not closeable in CDM. Reopend ever. Only closeable over closing complete CDM.
624753	[WBID1779156887] Exception is not resumable

624792	INCA-CANTransmit: Rate Range does not match documentation
624894	CDM crash when copy paste [WBID2854506838] Character does not understand convertFor:
625233	WB while opening Experiment from CDM: [NetWBID1584879455] System.Runtime.InteropServices.InvalidComObjectException: COM object that has been separated from its underlying RCW cannot be used
625344	CANFD XCP : Vector device is not automatically reinitialized in "Retry Always" mode
625505	[WBID2725107926] System error on attempt to close CDM
625540	Using CDM Option is unexpected updated: CDM is now opened within Multi Column CDM which was before opened as normal CDM
625772	CDM: For Scalars in Inline Editor is Changing Value executed 2 times when requested by Hotkey
625813	Copy and paste value from Excel to INCA did not work in case Name of TAB in Excel with Japanese (2Byte) Characters
625842	INCA-SIP: Project Overwrite does not show when Model name and Project name end up not being the same CASE
625918	WB in CDM "Multi-column" when moving columns: [WBID34407603] UndefinedObject does not understand longName
626142	CDM: [WBID2439505596] DEAxisObjects does not understand cdmFunctionSortBlock:
626335	CDMMultiColum Filtering - Filter toggle "Value matrix" filters also "Cubes"
626372	CAN-Monitoring with ARXML and SecOC at Frame level does not work
626774	[WBID1166204626](ExCLDTIndexOutOfRange) Index out of range. Note: Solved with INCA V7.2.15
626798	INCA freezes sporadically if a start-stop is detected during measurement
627029	Changes done to 'Display x axis' and 'Display y axis' options in Properties window are not saved properly.
627160	Multicomun CDM: filter is not applied correctly after exchanging source and destination
627198	No values from device FETK when two FETKs are connected on an ES89x device.
627703	Unable to reset enumerated axis map to reference page values for selected area
627796	INCA-SIP: Could not display test points in the variable selection window of INCA.
628084	Copy from DCM not performed: When manually editing INCA supports a feature "set to limits". All values outside the bounds are set to the limits. The Copy in CDM does not support this to avoid unexpected results.
628273	BR_XETK-S40_ Flash driver does not start
628338	Loss of communication after running reset/controller flash. Note: Solved with HSP V12.0.0
628415	Intermittent Target server crash due to high amount of calculated signals used in the experiment. Note: Improved, but due to performance it is recommended to reduce the amount of calculated signals.
628432	INCA-CANTransmit: Missing samples on USB Devices
628461	INCA V7.3.0 Beta: Typical ProFConfig with DLLs in INCA 7.3 not supported
628489	Invalid parameter detected: CAN_SEND_CYCLIC_MESSAGE_START" message
628631	Multicolumn CDM is not active when corresponding option is set in cdmDefault.ini
628676	XETK-V2 project : After Running Reset of ECU, handshake with ECU is not performed normally yet. Note: Solved with HSP V12.0.0
628731	SFH hostInterfaces dialog - checkboxes do not look correctly
628746	[WBID2388367314] CDMTableWidget does not understand expandPos:notify:makeVisible:
628771	ServicePackInstaller: Changing UI language improved for 64 Bit installations

628825	Error handling in CCP upload is not correct
628913	Text fields in VUI changes position undesired
628922	CDM: WB "[WBID570147687] MISSING 2 in krn" occurs when opening menu "Datasets" from CDM using MultiColumnView
629110	Update references INCA Release Notes / Installation Guide according privileges
629301	ETAS License Manager: Returning a License does not work without .lic-file
629307	[WBID3896808366] ASAP2NameTableCharacteristic does not understand , - Solved by repairing the experiment
629513	FETK-S1.1: No error message if too many Trace windows with the same core are defined. Note: Solved with HSP V12.0.0
629566	ServicePackInstaller: Creat Installation.xml with new 64 bit entries / 64 bit support
629596	Switching layer in experiment: [WBID1798690937] Primitive failed in: PlatformFunction>>#callWith:with:with:with:with: due to Value out of range in argument 4
629998	NeoVI Fire 2 displays UUID error in INCA due to outdated "ocdj2534can.dll". Recommendation: Rename to to "ocdj2534can.dll.old" in "C:\Program Files (x86)\ETAS\ED-EBI_V2\Bin\Win32\Dll".
630051	P3max setting causes Seed request error
630213	INCA online Help how to install a ProF config needs improvement.
630227	[WBID3329787912] UndefinedObject does not understand byteAt: + [WBID3421345940] UndefinedObject does not understand byteAt:
630327	XETK-S21.0B "Error in XETK Protocol driver: XCP Communication error" occur after HSP changed from V11.5.1 to V11.14.0
630413	Usage of ES1135 with ASAP3 causes [WBID3910621239] (ExCPMStackOverflow) A stack overflow has occurred.
630462	CAN-Output device always reports connected
630475	Huge delay when opening experiments which contain HWI.DK/OHI devices with many signals
630730	Slews not zeroing on import and export
630803	Importing calculated signal from INCA7 to MDA8 has a wrong raster assigned
630806	FETK-T3 Visualization not working on all variables after configuration change. Note: Solved with HSP V12.0.0
630808	Copy and Paste of channel information for ES6xx causes INCA to freeze
631013	CDM writes sometimes unexpected values during CDM Compare, CDM Copy and CDM listing to the data exchange file (e.g. DCM, CDF, PaCo, CVX)
631255	MCE with ETK does not allow to calibrate after read error due to T15 off. Note: Solved with HSP V12.0.0
631270	[NetWBID1584879455] System.Runtime.InteropServices.InvalidComObjectException: COM object that has been separated
631340	TargetServer crashes during HW Int. with callstack 0xC0000005 in VectorPCAP.dll; If the Vector device is connected in cascade
631750	FETK/XETK: Disable Watchdog impossible because current INCA does not support to write to SPI Register via ProF script
631921	[ETK-S6.0] ES910.3 - ETK: Second start measurment failed. Note: Solved with HSP V12.0.0
632128	INCA V7.3.0 Beta: Project with multi byte character file path caused Hardware Configration Error
632510	CDM: INI files generated from CDM are not saved with the proper data. When reloaded, CDM shows wrong data
633127	Walkback at ARXML FLX_Cluster import: [WBID3137195360] UndefinedObject does not understand writeTempFile

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6   Contact, Support and Problem Reporting

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