

INCA V7.5-SP2 – What's New

Changes / Extensions done in this Version

Overview

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

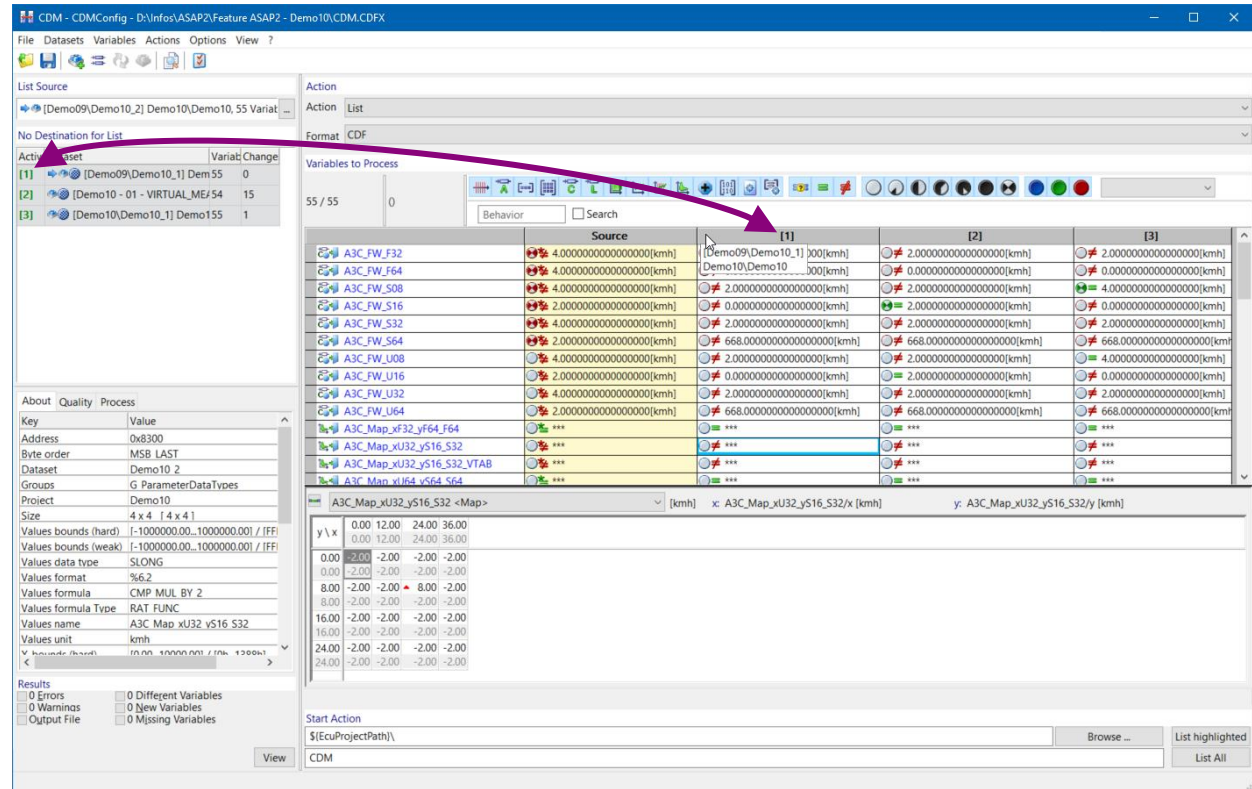
Functionality

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Functionality

CDM – Multi Column – use index as column header

- Show more columns by reducing column width
- Reference dataset name in the destination overview by index
- Show dataset name + path with mouse over index

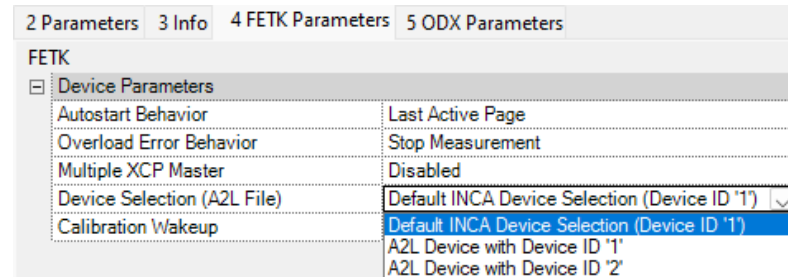


Functionality

COM-API – Change device selection (A2L file) for FETK

For FETK there can be multiple device types defined in the A2L file. INCA allows to select one of it before initializing the hardware by COM API.

Embedded UI of external config module



Additionally INCA offers now two more methods to handle option settings

```
public virtual bool SetOption(  
    string aParameterString  
)  
public virtual string GetOption(  
    string aParameterString  
)  
public virtual string GetOptionInformation(  
    string aParameterString  
)
```



```
public virtual string GetOptionHelpText(  
    string aParameterString  
)
```



```
public virtual string[] GetOptionNames(  
    string aParameterString  
)
```

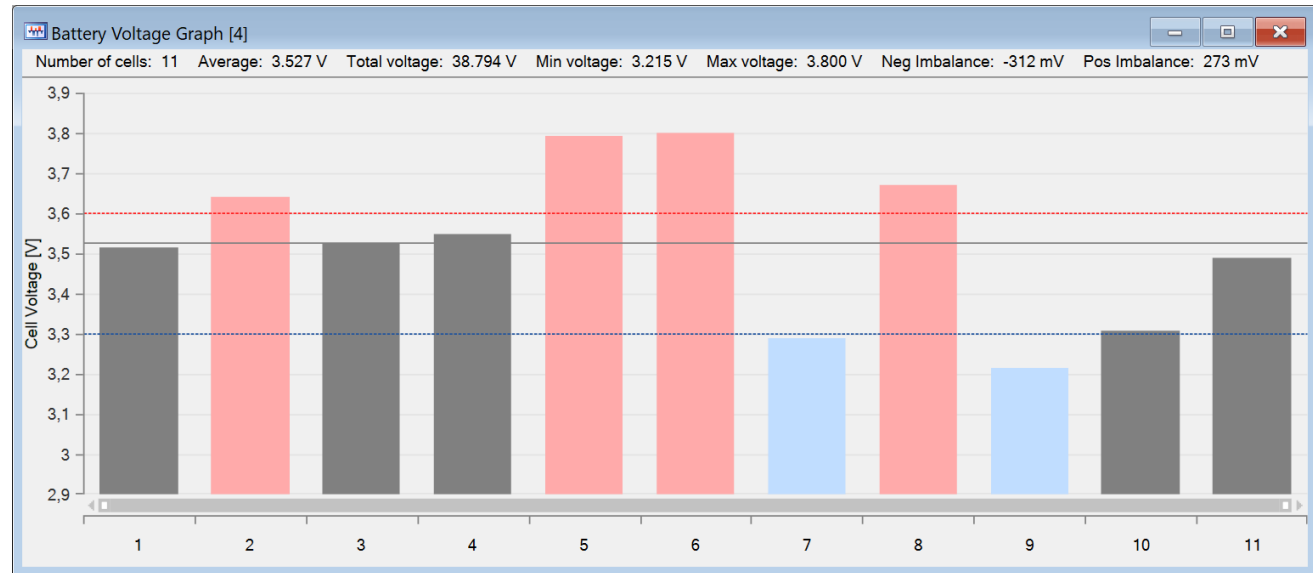
Functionality

Experiment – Battery Voltage Graph Instrument

The Battery Voltage Graph can be used in INCA to measure the voltage and imbalance of the battery cells.

The cells with the voltage out of the ideal range (lower/upper limit) are rendered with different colors.

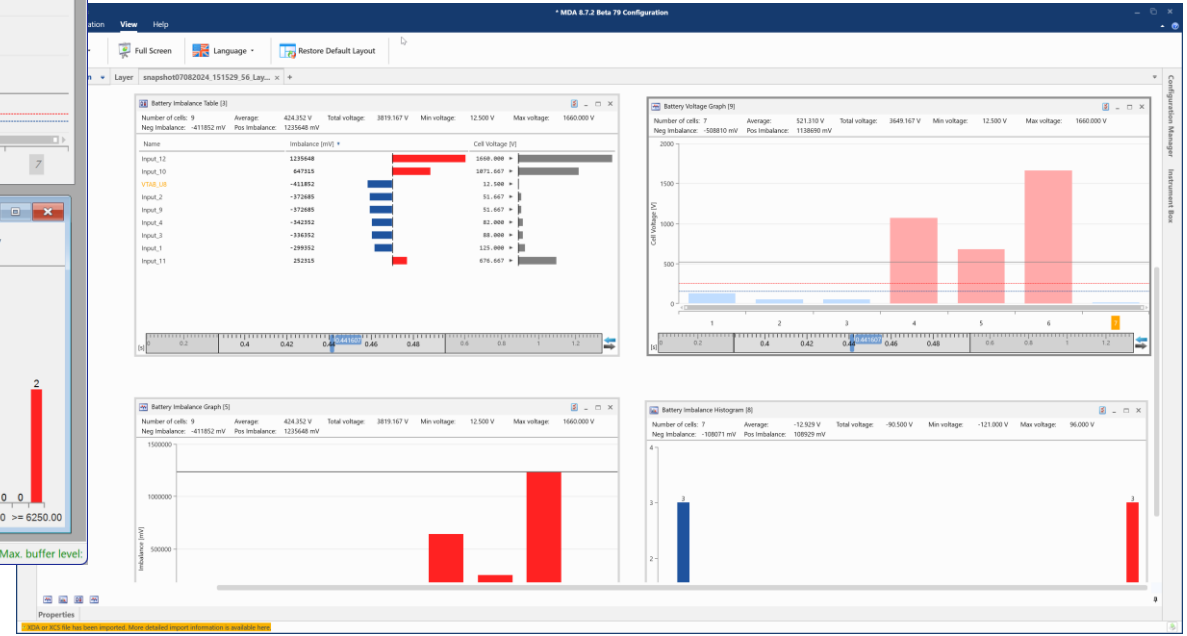
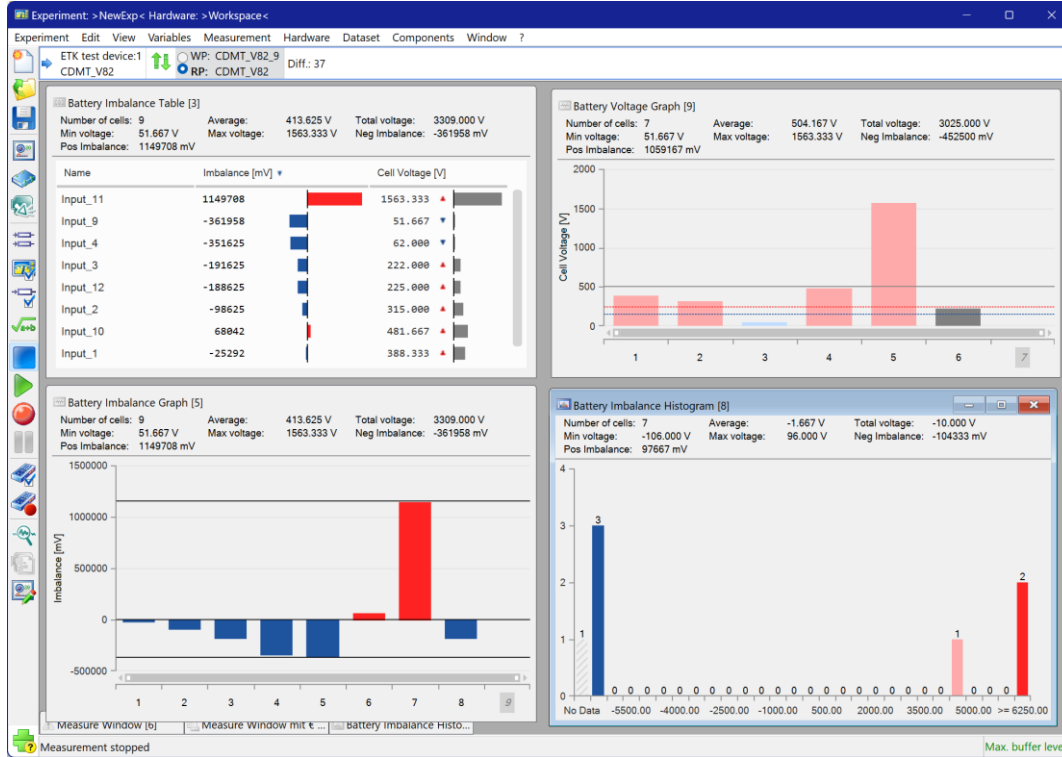
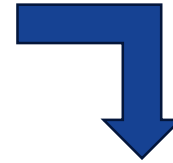
The average voltage is rendered as a vertical line.



Functionality

Export EV instruments in XDA

On recording snapshot, INCA EE exports the XDA file and opens it in MDA; the EV instruments are now also included

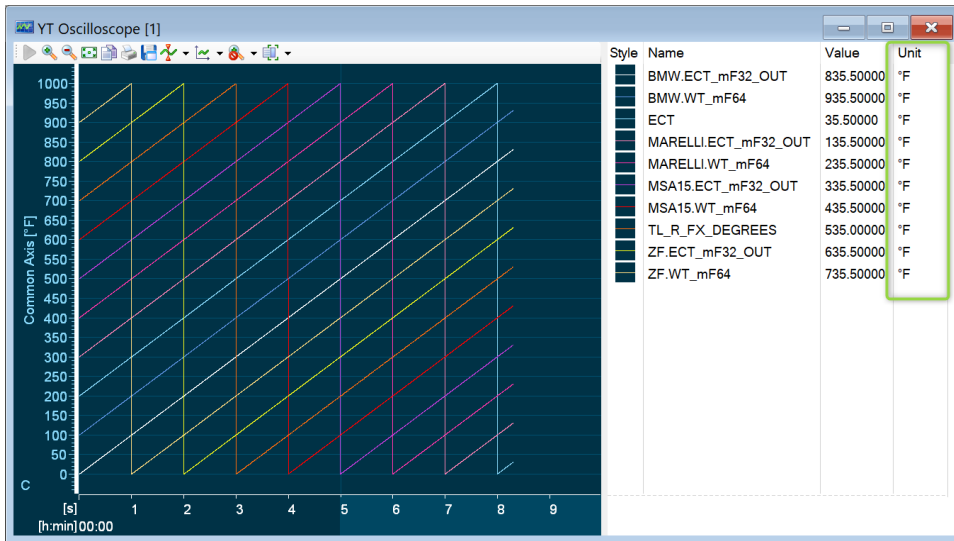


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Functionality

Variable units in VSD and oscilloscopes

The phys unit defined in the ECU project is shown.



The screenshot shows the INCA software interface. At the top, there are filters for 'All', 'Name', 'Description', and 'Unit °F'. Below this is a table of 'All Sources (Filtered, 10/2009 Visible)'. The table has columns for Name, Data Source, Unit, and Description. A green box highlights the 'Unit' column, which shows '°F' for all sources. Below the table, a detailed view for the selected source 'BMW.ECT_mF32_OUT' is shown, including its data source, type, address, unit, and description.

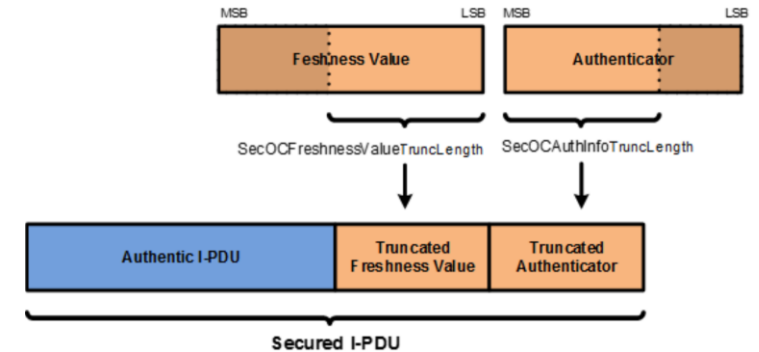
Name	Data Source	Unit	Description
BMW.ECT_mF32_OUT	ETK test device:1	°F	Engine coolant temperature, deg F.
BMW.WT_mF64	ETK test device:1	°F	Water temperature, deg F.
ECT	ETK test device:1	°F	Engine coolant temperature, deg F.
MARELLI.ECT_mF32_OUT	ETK test device:1	°F	Engine coolant temperature, deg F.
MARELLI.WT_mF64	ETK test device:1	°F	Water temperature, deg F.
MSA15.ECT_mF32_OUT	ETK test device:1	°F	Engine coolant temperature, deg F.
MSA15.WT_mF64	ETK test device:1	°F	Water temperature, deg F.
TL_R_FX_DEGREES	ETK test device:1	°F	Berechnete Last
ZF.ECT_mF32_OUT	ETK test device:1	°F	Engine coolant temperature, deg F.
ZF.WT_mF64	ETK test device:1	°F	Water temperature, deg F.

BMW.ECT_mF32_OUT
Data Source: ETK test device:1
Type: Scalar
Address: 0x4D60
Unit: °F
Description: Engine coolant temperature, deg F.

Functionality

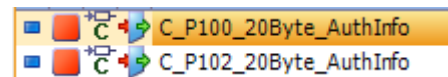
AUTOSAR – SecOC "Authentication Information" Signals

A Secured I-PDU of SecOC communication consist of an optional Secured I-PDU Header and an Authentic I-PDU followed by the optional Freshness Value and the Authenticator.



This data can now be measured with INCA by providing additional scalar measurement signals for Authentication Information based on the AUTOSAR description file (supporting AUTOSAR 4.3.0 or higher).

The functionality is available for CAN-, Ethernet- and FlexRay-Monitoring. The new signals have an “_AuthInfo” postfix.



INCA Product Family

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INCA Product Family

Vulnerability check

INCA is scanned for modules that INCA requires to operate. This SBOM (Software Bill Of Material) allows to check the vulnerability of the modules (material) against public vulnerability databases.

Critical modules are exchanged if improved or alternative modules are available.



INCA Product Family

INCA V7.5 license

In order to protect our software and software updates, the products shipped in the INCA V7.5-SPx Service Pack require new licenses.

INCA base software, MDA and all Add-Ons will check for an updated version of their product license.

These license versions are required:

INCA + Add-Ons: 7.5

MDA + Add-Ons: 8.7

Customers with a valid maintenance contract are eligible to receive software updates and will get new licenses.

Please consult the [ETAS License Manager documentation](#) for instructions how to upgrade your licenses.

General Notes

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General Notes

Compliance to General Data Protection Regulation

Please note that personal data is processed when using INCA. As the controller, the purchaser undertakes to ensure the legal conformity of these processing activities in accordance with Art. 4 No. 7 of the General Data Protection Regulation (GDPR).

As the manufacturer, ETAS GmbH is not liable for any mishandling of this data.

Data categories

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

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

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

General Notes

Seminars offered at ETAS Locations Worldwide or at Customer Site

Deep skills and sound knowledge are essential prerequisites for handling software tools of ever-rising complexity. Our trainers are highly experienced engineers in the field of engineering and support, who relish sharing knowledge on ETAS products and development processes. Target groups for the trainings are beginners, advanced users and those who wish to expand their existing knowledge. All trainings are offered at the ETAS Academy or on site at the customer´s. INCA Application is offered as presence or online training.

INCA – Calibration (3 days)

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

INCA - Advanced Calibration Techniques (2 days)

- Advanced functionalities in INCA, Tips & Tricks. INCA experience is required
- EHANDBOOK Navigator, INCA Flow

INCA - FLOW Coaching

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

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

General Notes

Usage of virtual PC Machines

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

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

ETAS recommends to use real PC hardware.

General Notes

Minimum System Requirements

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

Recommended System Requirements

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

Supported OS

- Windows 10 64Bit Pro / Enterprise
- Windows 11 64Bit Pro / Enterprise
- Windows Server 2016 64Bit / 2019 64Bit / 2022 64Bit
- See also <https://learn.microsoft.com/en-US/lifecycle/>

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

General Notes

Additionally Installed Components	INCA V7.4	INCA V7.5
.Net-Runtime-Environment	V4.8 ¹⁾	V4.8 ¹⁾
VCxRedist (Vcredist_x86 / Vcredist_x64)	VC9+VC10+VC14	VC14.38.33130.0 (or higher)
JAVA SDK Version j2sdk1.4.2_11	X ²⁾	X ²⁾
Perl V5.30.0	X	X
ETAS Certificate	X	X
Direct X	V9 (or higher)	V9 (or higher)
ETASShared	14	15
Windows 8.1 64Bit	X ^{3) 5)}	-
Windows 10 64Bit	X ³⁾	X ³⁾
Windows 11 64Bit	X	X
Windows Server 2016 64Bit / 2019 64Bit	X	X
Windows Server 2022 64Bit	X ⁶⁾	X
¹⁾ This component is installed only when no or an older version is installed. If a newer version is already installed, it will not be touched. This is checked by a Microsoft installation routine. ²⁾ This component is installed only with ODX LINK ³⁾ For hardware driver support see release notes ⁵⁾ .NET V4.8 needed (available from Microsoft Support .NET V4.8) ⁶⁾ beginning with INCA V7.4 SP2		

Thank you!