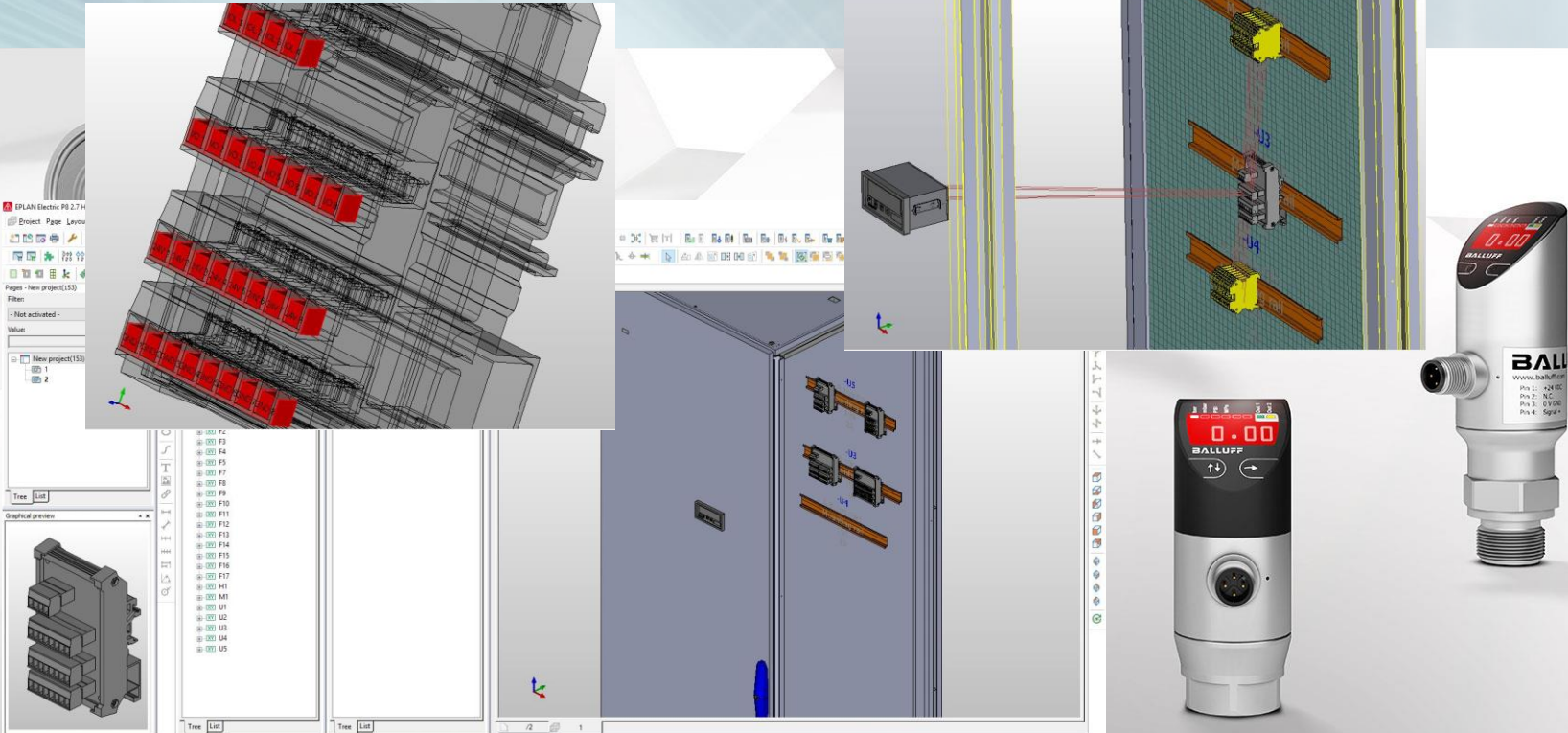


# Expansion of the Balluff catalog with CAE data



# WORLDWIDE.

**BALLUFF**

A world map with a white background and black outlines of continents and countries. Red dots are scattered across the map, representing Balluff's global presence. A cluster of black building icons is located in Europe, with lines connecting them to various red dots across the continent. Other red dots are visible in North America, South America, Africa, the Middle East, and Asia.

**37** SUBSIDIARIES WITH ADDITIONAL REPRESENTATIONS  
AND **10** PRODUCTION SITES  
IN **68** COUNTRIES, MORE THAN **4000** EMPLOYEES

A large satellite dish antenna is shown from a low angle, looking up. The dish is white and has a complex network of cables and structural supports. A worker in a blue uniform and yellow hard hat is standing on the surface of the dish, providing a sense of scale. The background is a clear blue sky with some light clouds.

WITH **EXPERIENCE**  
**AND COMPETENCE**  
IN MANY SECTORS:

- Automobile industry
- Electric drive technology
- Energy
- Factory automation
- Semiconductor industry
- Hydraulic drive technology
- Plastics, rubber and tyres
- Life science
- Metal processing
- Steel industry
- Packaging industry

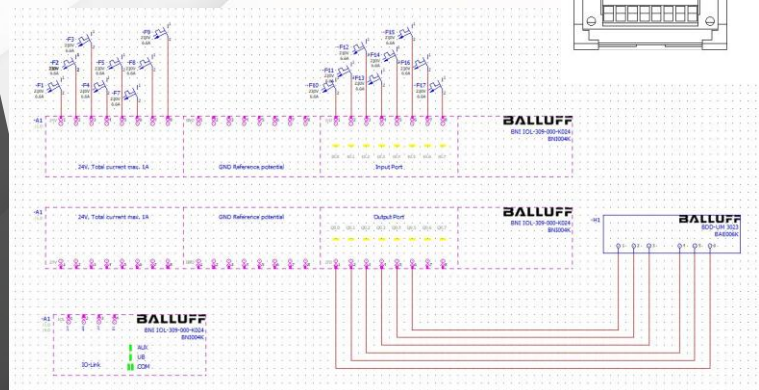
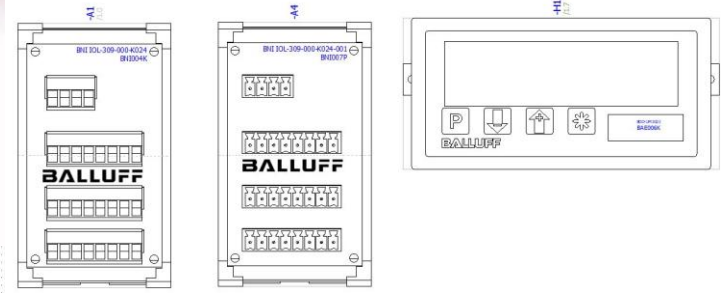
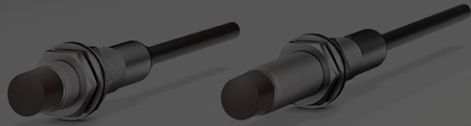
# REFERENCES

WE ARE COMMITTED TO  
THE FOLLOWING COMPANIES  
TO NAME A FEW:



## Expansion of the Balluff catalog with CAE data

- Growing customer demand
- Technical and organisational implementation
- Initial experiences
- CAD, CAE, Rendering – three sides of a process
- Additional objectives



## IDEA AND INITIAL EXPERIENCES

Growing customer demand a reason for EPLAN files procurement  
Since 2018 – in cooperation with CADENAS

eCAD or electronic CAD data with Balluff includes:

- table of functions
- the circuit diagram as macros ready to use
- technical product information
- product images
- links to the technical data sheets and website

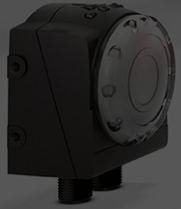
The eCAD data serves for the creation of electric and pneumatic circuit diagrams. In addition to the mCAD design data – eCAD data a part of the computer-aided design.



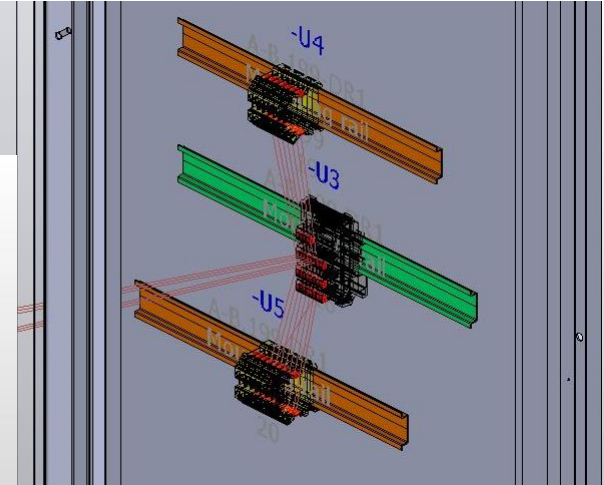
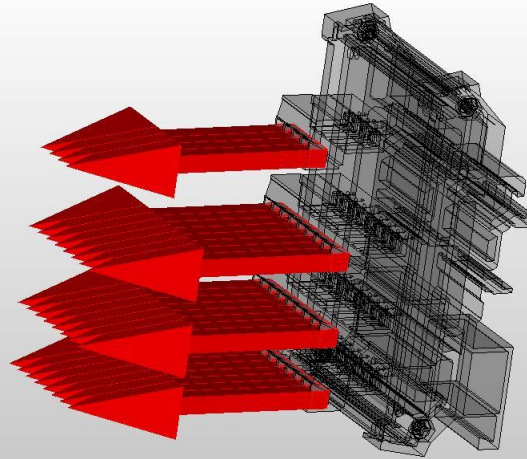
Previous experiences with CAE creation with CADENAS:

- Positive customer feedback
- 800 eCAD downloads in February
- Standard process and „Fastlane“ defined (Macros in 24h at the customer's)
- Very good quality of the macros, further independent development
- eCAD preview of products via eCAD portal possible
- eCAD data can be called up directly via the Balluff website





## IMPLEMENTATION AND ORGANISATION AT BALLUFF



We have defined 3 categories of CAE orders:

New products  
Standard planning

Filling of data gaps  
Standard planning

Customer requests  
"Fastlane" creation

An Excel export file serves to create the mCAD, eCAD and renderings data

PV	AB	BC	ST	CAD available	CAE available	PX	Connector Diagram FILE	Connector view caption	Wiring Diagrams FILE
PV1198382	BNI IOL-803-102-R036	BNI00CZ	AF	yes	no	VIU_56673_00_000.tif	VIU_56805_00_000.tif	PIN 1: +24V;PIN 3: GND, reference potential;PIN 4: C/Q, IO-Link DC-Channel;IO-Link interface;PIN 2: Comm. (Exp. Mode)	
Wiring diagram caption	Ref Image	Approval/Conformity	Frame type	Height	Length	Mounting	Width	Colors, number	
	56673_00_P_00_00_00.png	CE;cULus;WEEE	2.V	62.4 mm	57.5 mm	Screws M22	61.8 mm	7	
Contact, surface protection	Housing material primary	Housing material primary, note	Housing material secondary	Net weight	Weight unit	Product Group	Product Family name	Parent part name	
nickel plated 2 µm/gold plated 0.4 µm	PC	Transparent	PPS	118.182	GRM	Signaling and Display Units	Visual	R036	

We have developed a guideline on the basis of which the CADENAS team decides for themselves, whether a 3D or 2D macro is needed.

After creation and release, the data is sent to

- EPLAN portal
- CADENAS portal
- onto the Balluff homepage (link to the eCAD CADENAS portal in the download area).

[https://www.balluff.com/local/de/productfinder/#?data=selection%5Bca%5D%3DA0013%26selection%5Bcg%5D%3D%26selection%5Bproduct%5D%3DG1301%26selection%5Bproduct\\_variant%5D%3DPV152273](https://www.balluff.com/local/de/productfinder/#?data=selection%5Bca%5D%3DA0013%26selection%5Bcg%5D%3D%26selection%5Bproduct%5D%3DG1301%26selection%5Bproduct_variant%5D%3DPV152273)

## SmartLight – LED-Signalsäulen

[← Zurück](#)



Abbildung ähnlich



Start > [Human Machine Interfaces](#) > [SmartLight – LED-Signalsäulen](#)

Bestellcode: **BNI0072**  
BNI IOL-802-000-Z036

Menge:  [Mengenstaffel](#)

[🛒 In den Warenkorb](#)

Preis: **369,00 EUR**

[☰ Auf die Vergleichsliste](#)

Für individuelle Preise melden Sie sich bitte im  
Warenkorb an.

[🔧 Zubehör](#)  
[📄 Downloads](#)

[📞 Kontakt aufnehmen](#)  
[☰ Auf die Merkliste](#)

Mit unseren Melde- und Anzeigeräten wissen Sie jederzeit, wie es um die Produktion steht oder wo sich ein Werkzeug gerade befindet. Sie überwachen zuverlässig den Zustand von Maschinen und Anlagen und visualisieren die Ausgangssignale der Sensoren.

# IMPLEMENTATION AND ORGANISATION AT BALLUFF

**BALLUFF**

BALLUFF

BRANCHEN UND LÖSUNGEN

PRODUKTE UND SERVICES

UNTERNEHMEN

Suche

Warenkorb

Mein Balluff

Zinkdruckguss

Befestigung	Schrauben M18
Umgebungstemperatur	-5...50 °C
Schutzart	IP65
Übertragungsrate	COM2 (38.4 kBaud)
Prozessdatenzyklus min.	5 ms
Prozessdaten OUT	3 Byte

Downloads

Datenblatt	<a href="#">PDF Download</a> <input type="text" value="Deutsch"/>
CAD-Modelle	<a href="#">BNI0072 - BNI.IOL-802-000-Z036</a>
CAE (ePlan)	<a href="#">BNI0072 - BNI.IOL-802-000-Z036</a>
Bedienungsanleitung	<a href="#">Download</a> Englisch - 0.5 MB <a href="#">Download</a> Deutsch - 0.52 MB
Gerätebeschreibungsdatei	<a href="#">Download</a>

# IMPLEMENTATION AND ORGANISATION AT BALLUFF

**BALLUFF**

**BALLUFF** BNI0072 - BNI IOL-802-000-Z036 ×

Suche Warenkorb Mein Balluff

CAE herunterladen

BALLUFF BNI IOL-802-000-Z036

VERF Verfügbarkeit	Verfügbar		
BC Bestellcode	BNI0072		
AB Artikelbezeichnung	BNI IOL-802-000-Z036		
SN Schnittstelle	IO-Link		
FN Funktion	Signalleuchte		
AS Anzahl der Steckplätze			
IEC Schutzart nach IEC 60529	IP54 (Rückseite IP20)		
BAU Bauform			
KONF			



# IMPLEMENTATION AND ORGANISATION AT BALLUFF

**BALLUFF**

BNI0072 - BNI IOL-802-000-Z036

EDZ	BAL BNI0072		🔒
WEIGHT Gewicht	630	g	🔒
TRAFFIC Zollnummer	85318070		🔒

Bemaßung

The technical drawing shows a cylindrical component with the following dimensions:

- Threaded section: M12x1 (length 18.0), M18x1 (length 18.0)
- Main body length: 252.0
- Total length: 309.0
- End section length: 57.2
- End section diameter: 60.0

A dropdown menu titled 'Bemaßung' is open, showing options: 'Bemaßung', 'E-Plan Variant A', 'E-Plan Variant B', 'E-Plan Variant C', 'E-Plan Variant D', and 'E-Plan Variant E'.

49847\_00

# IMPLEMENTATION AND ORGANISATION AT BALLUFF

**BALLUFF**

BNI0072 - BNI IOL-802-000-Z036

TASTE  
Zollnummer 85318070

Bemaßung

E-Plan Variant A ▼

-H? BALLUFF

+24V n.c. GND C/Q, IO\_Link

1 2 3 4

BALLUFF\BNI\BNI IOL-802-000-Z036.ema  
BNI IOL-802-000-Z036  
Multi-line  
Variant A  
Signaling and Display Units

⌵ ⌵ ⌵ ⌵

## Balluff BNI0072 on PARTcommunity portal.

BNI0072

Home Back Germany Product Image BALLUFF BNI IOL-802-000-Z036  
Balluff > Industrielle Netzwerktechnik > Netzwerk-Module

CAD-Modellauswahl

Generiere CAD MODELL Generiere PDF-Datenblatt Angebotsanfrage

Bitte wählen Sie das gewünschte Produkt anhand der technischen Kriterien aus. Änderbare Werte sind mit einem Tabellenicon markiert. Auf das Icon können Sie die Auswahl zurücksetzen

Auswählbare Produkte: 1 Zum Teilevergleich hinzufügen

VERF Verfügbarkeit	Verfügbar
BC Bestellcode	BNI0072
AB Artikelbezeichnung	BNI IOL-802
SN Schnittstelle	IO-Link
FN Funktion	Signalleuchte

Additional files

The following files are available for the current project.

Search:

ePLAN.edz

Generiere CAD MODELL Abbrechen

## Balluff BNI0072 on PARTcommunity portal.

The screenshot shows the Balluff PARTcommunity portal interface. At the top, a search bar contains 'BNI0072'. Below it, navigation icons include a home button, a back arrow, a German flag, and a product image. The breadcrumb trail reads: 'Balluff > Industrielle Netzwerktechnik > Netzwerk-Module'. The main section is titled 'CAD-Modellauswahl' and contains two buttons: 'Generiere CAD MODELL' and 'Generiere PDF-Datenblatt'. A green information message states: 'Bitte wählen Sie das gewünschte Produkt anhand der technischen Zeichnung. Auf das Icon können Sie die Auswahl zurücksetzen'. Below this, it says 'Auswählbare Produkte: 1' with a link to 'Zum Teilevergleich hinzufügen'. A table lists product attributes:

Attribute	Value
VERF Verfügbarkeit	Verfügbar
BC Bestellcode	BNI0072
AB Artikelbezeichnung	BNI IOL-802-000
SN Schnittstelle	IO-Link
FN Funktion	Signalleuchte

Overlaid on the right is a Windows File Explorer window showing the contents of a ZIP file downloaded from the portal. The address bar shows the path: '\\ackbar\users\$\Kligermann\Eigene Dateien\Downloads\balluff\_BALLUFF\_BNI\_IOL-802-000-Z036.zip\'. The toolbar includes icons for adding, extracting, checking, copying, moving, deleting, and viewing properties. The file list contains:

Name	Größe	Gr
readme-and-terms-of-use-3d-cad-models.txt	2 241	
BALLUFF BNI IOL-802-000-Z036.stp	127 686	
BAL.BNI0072.edz	894 577	

## Balluff BNI0072 on EPLAN data portal.

The screenshot displays the EPLAN data portal interface. At the top left is the 'ePLAN data portal' logo. Below it is a navigation bar with icons for home, search, and user profile. The main content area shows a search result for 'BNI0072'. On the left, there are filter options under 'OPTIONEN' for 'Hersteller', 'EPLAN-Katalog', 'Merkmale', and 'Sprachen'. The search results show one item: '[1] BAL.BNI0072'. To the right of the item name is a small image of the component. Below the image are technical details: 'Hersteller: BALLUFF Balluff', 'Typnummer: BNI IOL-802-000-Z036', 'Bestellnummer: BNI0072', 'Bezeichnung: Melde- und Anzeigeräte', 'Produktgruppe: Elektrotechnik > Meldeeinrichtungen > Meldeleuchte', 'Merkmale: [Shopping cart icon] [Print icon] [Download icon]', and 'Downloads: 256'. The breadcrumb trail is visible at the bottom of the product details.

**ePLAN**  
data portal

Hersteller  
EPLAN-Katalog  
Merkmale  
Sprachen

SUCHE  
Suche: BNI0072X

OPTIONEN

Artikel 1 bis 1 von 1 10 Sortiere nach Relevanz

[1] **BAL.BNI0072**

Hersteller: **BALLUFF** Balluff  
Typnummer: BNI IOL-802-000-Z036  
Bestellnummer: **BNI0072**  
Bezeichnung: Melde- und Anzeigeräte  
Produktgruppe: Elektrotechnik > Meldeeinrichtungen > Meldeleuchte  
Merkmale:   
Downloads: 256

## eCAD data for the configurable products.

### Schnittstellendetails

1 x Position und Geschwindigkeit

### Messlänge in mm

1524

50 - 4000

### Anschlussart

Stecker und Buchse, axial, M12, 5 polig, Stecker, axial, M8, 3 polig

### Typenschlüssel

BTL5-T110-M1524-P-S103

### CAD-Modelle

Anzeigen

Link to the Balluff website

BTL5 -P- SERIE - PROFIBUS

Generierung CAD Modelle

CAD/CAE herunterladen PART2cad PDF Datenblatt

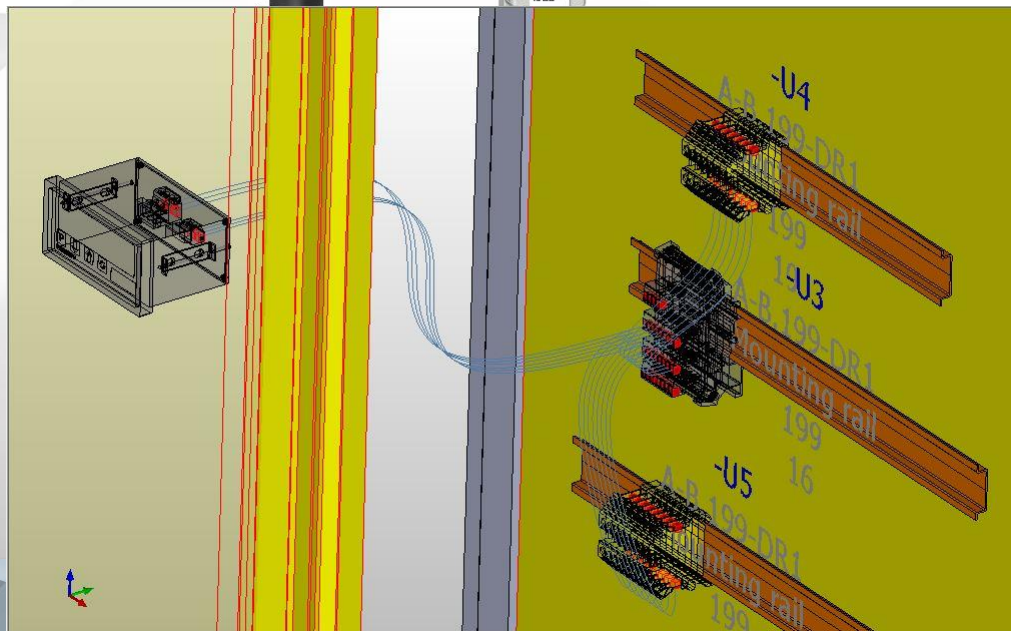
Filter 2D 3D

- ePLAN edz
- 3D Studio MAX (3D)
- Allplan 2008 (3D)
- ASCON C3D (3D)
- AutoCAD >=V14 (3D)

Download starten PDF Datenblatt an CAD Modelle anhängen

SV Spannungversorgung	24 V DC	
NENN Standard-Nennlaengen	50 1524 4572	mm
POS Positiongeber	BTL5-P-3800-2	
SK Software-Konfiguration	1 Magnet	
BR Baud-Rate	-	

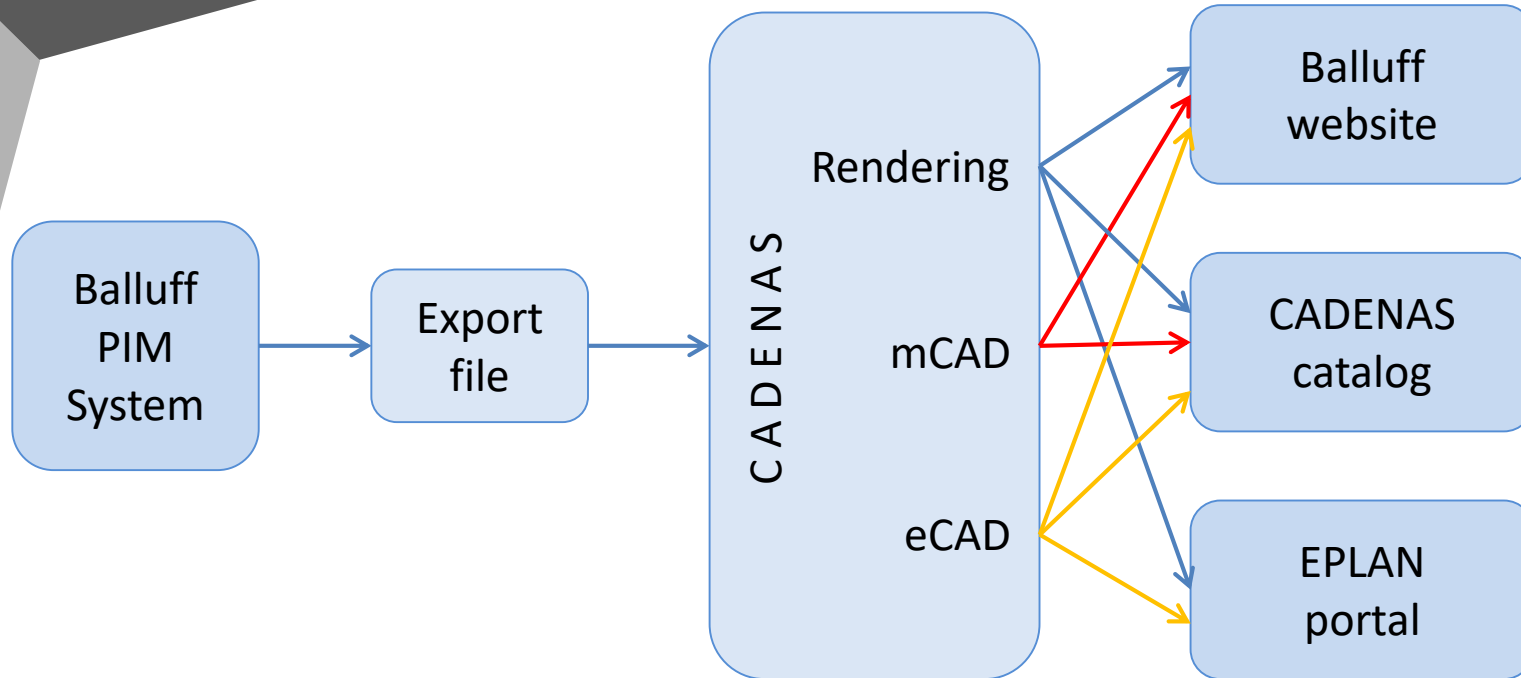
CAD, CAE,  
RENDERING - THREE  
SIDES OF A PROCESS





CAD, CAE,  
RENDERING – THREE  
SIDES OF A PROCESS

**BALLUFF**



## Benefits of cooperation of Balluff with CADENAS in the CEA area. View of the catalog manufacturer.

1. The data quality and data completeness are at a new level.
2. Data flow is used for the creation of 3 types of media (CAD, CAE, rendering).
3. Once created, CAE data is used on at least 3 platforms.
4. The flexibility of the data creation is very high.
5. When there are product changes, both mCAD and eCAD are updated.
6. Platform for the creation of digital twins.

**Benefits of cooperation of Balluff with CADENAS in the CEA area. View of the customers.**

1. Data quality. Along with the macros, the functional and commercial data is always available.
2. The CAD and CAE data is all from "one source", there is no contact person.
3. The CAD and CAE data has uniform technical data, drawings and symbols.
4. The data is always current.
5. Project planning and project implementation is easier and quicker for the project management.

## Our objectives:

- eClass attributes as output data
- Dynamic values in edz files
- Exchange format for eCAD
- Digital twins

WE LOOK FORWARD TO  
FURTHER CHALLENGES.



CADENAS  
Output



*Congratulations! You got  
perfect twins!*

WE LOOK FORWARD TO  
FURTHER CHALLENGES.

**BALLUFF**

THIS IS  
WHERE YOU  
CAN REACH  
US



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