Nothing’s right at the building site?
Get rid of trouble before it arises!
BIM and digital product data
Why all the effort?

There are many who have a part in a building project, for example planners, architects, structural engineers, technicians, etc., over a long period of time.

If any one of them fails to receive needed information in time, the planned milestones are inevitably delayed. The costs then continue to pile up ...

Since the projects are also divided into different phases, new teams with other systems and tools are active in each phase.

All the participants have individual areas of responsibility for whom specific information is required, which finally has to be coordinated. The data then often doesn’t fit together.

The challenge: Manufacturers of architecture components must provide thousands of customers, who have the most diverse requirements, with suitable data for the planning of their building projects.
In providing data, there is a lot to take into account such as diverse CAD systems, classifications, specifications, levels of development, languages and more ... this quickly results in millions of possible combinations.

**How do you manage to satisfy all component manufacturers?**

**By ignoring the needs and stubbornly supplying the standard data that's available?**

It just won’t work. If the special requirements of the product data are not met, dissatisfied customers will quickly start looking for alternatives from your competitors.

**Or perhaps by generating the desired data manually in painstaking detail work?**

Perhaps too much of an effort. This demands substantial time and personnel resources. While customers are waiting on their individual data package, their displeasure is ever-increasing.
Perfect product data for AEC & BIM

BIMcatalogs.net of CADENAS offers a completely different and easier solution

Thanks to the flexible data model of BIMcatalogs.net, component manufacturers can easily provide all possible combinations as required.

No matter which CAD system, which level of development, which classification, specification or language your customer needs at the time, suitable data can be generated on the fly for anyone via a central database. In addition, information is available from PIM, ERP and other internal databases such as prices, article numbers, etc.

Thus all customer requests are optimally fulfilled and the BIM data is always up to date.
Proven technology for digital 2D & 3D product catalogs since 1992

CADENAS has been specialized for over 25 years now in the creation, maintenance and marketing of digital product data for planning. We are thus one of the leading providers of 3D & 2D manufacturer catalogs in the field of engineering. This proven technology has been enhanced and optimized for BIM & architecture and adapted to the special requirements of those sectors.

Mechanical engineering vs. architecture: 80% of the requirements of digital product data is identical

The difference between engineering and architecture, in regard to 2D & 3D CAD data, only seems significant at first glance: A closer comparison shows that approx. 80% of the demands made on engineering data by mechanical engineers are identical with those made by the architecture sector.
CADENAS technology, specially optimized and further developed for the BIM & AEC sector

In spite of the overlap of demand made on digital product data by the fields of mechanics and architecture, there are also a number of individual requirements for the BIM sector. CADENAS invested two years of development work in order to offer component manufacturers the possibility to provide architects, civil engineers and TGA specialists with multi CAD capable 2D & 3D BIM data. Thus the proven technology for digital manufacturer catalogs has been further developed and optimized especially for the BIM & AEC sector. And so manufacturers of building components offer their customers an optimal service, which always provides the best up-to-date product information and data for all trades throughout the entire planning process.
The modular product catalog for all output formats & distribution channels

With the CADENAS solution, you’re putting your trust in a product catalog that meets your own demands as well as those of your customers, both today and in the future.

All relevant product information is managed in a central database. The modular system makes a seamless integration into your website possible, e.g. an app, the publication via other web channels or the generation of 3D PDF data sheets.
Multi CAD Marketing & Sales
Vertical market places
Statistics
Social media
Trade show entertainment
Holographic display
Virtual reality
Anaglyph 3D
Augmented reality
Print & offline media
Printed catalog
3D PDF data sheet
DVD / CD
Digital Product configurator
CAD download portal
Mobile app
3D WebGL
Marketing & Sales
Statistics
Vertical market places
Digital
**Keep manufacturer data up-to-date**

Thanks to the deep integration of BIMcatalogs.net (e.g. in Autodesk Revit), product catalogs and product data are available for users in a matter of seconds. Architects, designers, TGA experts and planners benefit from the easy „configure, insert & replace” system and the extensive configuration options.

With the consistent link to the original manufacturer data, the inserted 3D BIM CAD objects are always up-to-date. Whenever any product information in the electronic product catalog is modified, the modifications are automatically taken over in the present design in Autodesk Revit.

**Without BIMcatalogs.net, the updating of product data is not ensured**

The duration of a project is usually a long time. Right at the beginning, the planner has access to the current BIM data of the manufacturer. If, in the course of the project, modifications of the product data are made by the manufacturer, the planner is not informed about it and continues to work with obsolete BIM data. To obtain current product data, the planner must actively and manually do the updating himself. In so doing, product data might be overlooked. This would then mean that the design is no longer up-to-date, which can lead to wide-ranging problems with implementing the project.
Keep product data up-to-date with the BIMcatalogs.net Content Plugin

The BIMcatalogs.net Content Plugin of CADENAS makes it easy for planners to insert Revit RFAs per „Configure, Insert & Replace“. Direct RFA selection is obtained and the data can be configured as needed. What’s progressive about the CADENAS plugin: Manufacturers and planners stay in touch during the entire BIM process via the plugin. If the manufacturer changes his product data, planning is automatically updated. The planner always receives up-to-date or extended data without having to manually intervene. It saves time and ensures that the design contains no obsolete information that could lead to problems later on in the course of the project.

Overview of the advantages

- Easy insertion of Revit RFAs via „Configure, Insert & Replace“
- Revit RFAs can be easily modified and updated
- Direct RFA selection and configuration
- Constant link with manufacturer data for future updates

Revit RFA family technology with BIMcatalogs.net Plugin
3D CAD download portal

With a download portal based on the BIMcatalogs.net technology, you can provide architects, electricians, craftsmen and engineers with 3D multi BIM CAD data from your product portfolio with all the necessary information.

In doing so, the BIM CAD data can be configured online, including more than 100 common formats, e.g. Autodesk Revit, Nemetschek Allplan and GRAPHISOFT ARCHICAD and downloaded into the resp. CAD system or inserted into current projects.

Export in more than 100 native CAD formats

Does providing suitable CAD models for any CAD system and any version sound impossible to you? No problem with eCATALOGsolutions!

Your components will be available to engineers as genuine native 3D CAD models in more than 100 different file formats of common CAD systems such as Autodesk Revit, Allplan, ArchiCAD Vectorworks, etc. .

An overview of the features

1. Individual layout according to your CI
2. Language selection
3. Individual configuration of components
4. Pictograms for the Visualisation of configuration
5. 3D CAD view with automatic dimensioning
6. Sources of supply

With the variety of CAD systems and versions available, market coverage for individual systems seldom exceeds 15%. With the CADENAS multi CAD solution, you can reach over 95% of the market.
Seamless integration of your download portal

You can make the digital data of your components easily accessible for download on your website with eCATALOGsolutions.

The download portal can be adapted seamlessly to your corporate design. On request, the intelligent engineering data can be provided as a download directly on the respective product page.

Scalable solution – eShop integration and more

In addition, the embedded technology offers the option to connect your existing e-Shop or your CRM systems. Based on the customer’s individual configuration, direct information can be retrieved about prices and delivery times.

An example for successful integration can be found here:

Product configurator of IMI Precision Engineering
App as mobile solution for planners, architects and property developers

With a CADENAS individual app, your customers and interested parties can conduct a mobile search for components and configure effortlessly in your electronic product catalog as well as quickly and easily forward information to others involved in the project (e.g. engineers).

The creation takes your corporate design into account and offers you many advantages such as:

- Best possible service for customers and interested parties through various research and configuration possibilities
- Worldwide distribution of your app and by way of your product catalog on marketplaces such as App Store, Google Play and Windows Phone Marketplace
- Speeds up the meeting culture for your customers and your sales with data research during the meeting
- The modular structure of the app enables you to determine the range of functions individually
**App features**

The modern structure allows you to individualize your app as desired. You can choose the scope and the functions for yourself, for example: 3D CAD models, search by sketch, full-text search, product configurator, offer requests, augmented reality, examples of application, news, support and more.

**The app as sales support**

Your sales will also benefit from an individual app: Mobile access to all the technical information on your products makes it possible to find the best component, together with the customer on site, to solve his design task.

To video clip: [https://www.youtube.com/watch?v=cDsxwgvWjWM](https://www.youtube.com/watch?v=cDsxwgvWjWM)
Interactive product configurator – individually on customer request

Nowadays, companies have to meet individual customer demands with tailored-made products. This means numerous challenges for manufacturers. Increased consultation for the correct configuration, individual creation of design data for the customers, costly calculation of offers ...

The CADENAS interactive configurator gives your customers the possibility to compile products error-free and individually, without CAD software and prior knowledge. Sets of rules help avoid false combinations before they happen. The suitable 3D geometry of the assembly is also automatically created.

It simplifies the design process for your customers while reducing the workload for your sales and services.

Example of product configurator KML Miller

The modular construction of the special cabins and container solutions of KML Miller offer the advantage of implementing customer-specific solutions by means of pre-defined modules flexibly, cost-effectively and with minimal development expenses. By implementing a CADENAS interactive product configurator, customers can assemble their desired container digitally according to individual needs regarding wall, roof and interior construction and export as intelligent 3D engineering data.

Live test the configurator:
https://kml-miller.partcommunity.com/
3D PDF data sheet

With eCATALOGsolutions, you can generate 3D PDF data sheets directly „on the fly“ from your electronic product catalog on the basis of the customer’s individual product configuration. Thus you can provide your customers in compact all the important information on the configured components. It’s your decision what information the 3D PDF data sheet should include.

Individual data tables

All important technical details for the product, e.g. order number, holding force, tightening torque, power, etc. is displayed clearly in tabular form.

Context and configuration- dependent information

Another possibility is the individual integration of dynamically-generated information “on the fly” such as local sales contact depending on the customer’s location, integration of technical diagrams as per customer configuration, etc.

Interactive 3D view

Integrate a 3D model of the configured component, providing every conceivable view by rotating, zooming and moving. The self-selected view can also be printed.

2D derivation with automatic dimensioning

Detailed 2D dimension drawings with important information such as tolerances and fits can also be included in the PDF data sheet.

Your Corporate Design

You decide how your 3D PDF data sheet should look and what information should be provided to the customer. We will create an individual template according to your wishes, taking your corporate design into account.
Can your product marketing excite your target group?
If your marketing still looks like this...

...Then it’s time for an innovative marketing strategy with eCATALOGsolutions!

Many component manufacturers still use well-tried methods, but one thing marketing needs to do: excite. This clearly requires more than a classic trade fair appearance. Marketing can reach its full potential only when modern technology is combined with creativity.

Trade fair planning old = proven?

With eCATALOGsolutions we are placing innovative tools in your hand, which will attract the attention of customers and those interested and make a lasting impression – whether trade fair, print or digital.
Virtual Reality (VR)

If you want to bring your product to life via virtual reality, you don’t necessarily need expensive technology: With a simple cardboard viewer, a smartphone and the CADENAS app, your customers and interested parties can immerse themselves in the virtual world.

Augmented Reality (AR)

- Use Augmented Reality Marker to bring your brochures and flyers to life with superimposed 3D models.
- Supplement your catalog with information by means of AR.
- Benefit from the live superimposition to quickly and easily create a preview of your objects directly at the building site.

To the video clip:
www.cadenas.de/videos/ar

To the video clip:
www.cadenas.de/videos/vr
**Holography**

Create the perfect illusion with the holographic display of the DREAMOCTM technology. Floating 3D animations offer incredible possibilities to present your products with this innovative presentation technology, for example at trade fairs.

The DREAMOC technology also makes it possible to combine real products with holographic animation.

>> Afag gave an impressive demonstration at the MOTEK with their innovations, in particular with a 3D and augmented reality presentation, showing that Afag is leading in the quality of their products as well as having the latest computer technology. Afag and CADENAS complement each other as technological leaders at the highest level. <<

Armin Doser  
CEO of Sales & Marketing  
Afag Automation AG
Classic marketing vs. eCATALOGsolutions – Who’s the champion?

What used to be a secret recipe in the past is possibly no longer the most promising marketing tactic today. It pays to have a closer look at whether traditional marketing instruments really still have the highest impact or whether there are other strategies that could promise more success.

How has the marketing budget been distributed up to now?

A look at the distribution of marketing budgets in industrial companies shows that traditionally the biggest share of nearly 40% goes for trade fairs, followed by classic print advertising. Are those really the most effective channels of communication to increase sales?

Trade fair & print advertising – popular, but highly overrated?

According to a survey among marketing and sales managers, there is agreement that traditional marketing strategies such as trade fairs and printed advertising are usually overrated when it comes to generating leads and sales opportunities. (Source: 2015 State of Inbound report, Hubspot). Experience shows that only 1-5% of the leads generated by trade fairs or print ads actually result in sales.

This is where the CADENAS electronic product catalog, with its 3D CAD download portal PARTcommunity, shows its strength. Around 87% of the manufacturer components downloaded by engineers and purchasers lead to real products sold on down the line..
Trade fair popular and expensive, but really efficient?

Whether the potential of optimized online sales is underestimated and the high value of trade fairs needs more thought can be easily determined. It pays therefore to have a closer look at the profitability of these two marketing instruments.

### Expenses of the exhibitor

**Stand size:** 100 m², **Stand rent:** 250 € / m²

<table>
<thead>
<tr>
<th>Expense</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Stand construction, transport, cleaning, guard, etc.</td>
<td>37,196.07 €</td>
</tr>
<tr>
<td>Other costs, e.g. advertising, guest service</td>
<td>8,091.79 €</td>
</tr>
<tr>
<td>Purchases, leisure, entertainment</td>
<td>3,260.84 €</td>
</tr>
<tr>
<td>Travel expenses</td>
<td>12,318.84 €</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td><strong>120,772.95 €</strong></td>
</tr>
</tbody>
</table>

**Download fee per download:** 0.30 €

### Calculated on the average

**Number of downloads/month:** 2,658

**Total costs/month:** 1,097,44 €

**Expenses of the exhibitor:**

- **Stand rent incl. utilities:** 25,000.00 €
- **Personnel costs:** 19,685.99 €
- **Room/Board:** 15,217.39 €
- **Travel expenses:** 12,318.84 €
- **Purchases, leisure, entertainment:** 3,260.87 €
- **Other costs, e.g. advertising, guest service:** 8,091.79 €
- **Stand construction, transport, cleaning, guard, etc.:** 37,196.07 €
- **Transport, cleaning, guard, etc.:** 37,198.07 €

**Grundlage:** AUMA_MesseTrend 2015

**300 Leads / Trade fairs**

(Incl. students, casual visitors, etc.)

**402,58 € / Lead**

**2,658 Downloads / month**

(engineers, designers, CAD users, purchasers, etc.)

**4,13 € / Lead**
The multiplier for your BIM Multi CAD product catalog

CADENAS eCATALOGsolutions not only offers you an optimal solution for the customer-friendly implementation of a digital product catalog, but also ensures maximum international distribution.

Our partnerships with numerous well-known marketplaces are the multiplier for your electronic product catalog.

Since releasing the native CAD catalog with CADENAS, we have ascertained that 10x more parts are being downloaded.

Anthony Padalino
Global Market Analyst
D-M-E Company LLC

Calculate your potential

Millions of engineers, purchasers and architects throughout the world use PARTcommunity.com and BIMcatalogs.net daily, and the linked vertical marketplaces.

Your Electronic CAD product catalog is thereby represented at over 85 online marketplaces, portals and social communities. Your electronic product catalog thus has a potential of reaching more than 16 000 000 users from over 100 000 companies.

Check the potential for your target groups and markets:
www.cadenas.de/kalkulator

Distribution of accesses to partcommunity.com, www.bimcatalogs.net and CADENAS Apps
The 360° solution for successful component manufacturers

eCATALOGsolutions offers a solution to cover all areas – marketing, sales and technical service – perfectly.

**Marketing:** Draw attention to your products with pioneering features. Your target group connects the innovative product presentation with an innovative product technology.

**Sales:** Every customer can be processed according to his needs and value. You offer the right products at the right time, at the right place and to the right person.

**Technology:** You reduce the workload of your engineers, frequently repetitive manual processing of customer requests is a thing of the past. Thus room is made for the development of innovative products.

Overview of your advantages with BIMcatalogs.net

BIM is reality today in construction and architechture. Are you already providing products to your customers in 3D BIM CAD format? We will show you how the BIMcatalogs.net solution differs from other solutions:

<table>
<thead>
<tr>
<th>BIMcatalogs.net</th>
<th>Web file share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiformat</td>
<td>✔️ Over 100 native 2D &amp; 3D BIM formats and much more</td>
</tr>
<tr>
<td>Catalog update</td>
<td>✔️ All formats simultaneously</td>
</tr>
<tr>
<td>Multiple languages</td>
<td>✔️ 15 languages available</td>
</tr>
<tr>
<td>Data migration and creation</td>
<td>✔️ With or without existing CAD</td>
</tr>
<tr>
<td>Marketing Opportunities</td>
<td>✔️ Your own web portal ✔️ Websites ✔️ Integration 3D PDF ✔️ Data sheet offline Free catalog ✔️ Mobile app</td>
</tr>
<tr>
<td>Product Configurator</td>
<td>✔️ Easy implementation possible</td>
</tr>
<tr>
<td>3D Preview</td>
<td>✔️ Integration into your website</td>
</tr>
<tr>
<td>Statistics as sales tool</td>
<td>✔️ Detailed lead reports</td>
</tr>
</tbody>
</table>
Benefit from our experience

CADENAS has been setting standards with the electronic product catalogs of eCATALOG technology since 1992. Benefit from years of experience with more than 700 successfully implemented product catalogs.

We will give you detailed advice on how you can best attune your electronic product catalog to your needs and to your target group. Together we can work out a detailed list of requirements and, with our know-how, we will contribute to an optimal digital product catalog for your customers and prospective customers.

CADENAS organizes work groups with suppliers and buyers to help you recognize general market requirements early on and to react.

We have known CADENAS for a long time. In our internal design, we often work with components from diverse electronic catalogs. Moreover CADENAS is one of the few providers of 3D CAD objects for mechanical engineering (plant engineering) as well as architecture (BIM). This way we kill two birds with one stone.

Herbert Pühringer
Design department and 3D CAD BIM libraries
Schiedel GmbH
CADENAS GmbH
Setting Standards

CADENAS is a leading software manufacturer in the areas of strategic parts management and parts reduction (PARTsolutions) as well as electronic CAD product catalogs (eCATALOGsolutions).

With its tailor-made software solutions, the company is a link between component manufacturers and their products as well as the buyers.

The name CADENAS (Spanish: process chains), with its 320 employees at 17 international locations, has been standing for success, creativity, advice and process optimization since 1992.

CADENAS has already established many important innovations and trends in its role as initiator and pioneer.

Those innovations include foremost:

- Multi CAD solution with native & intelligent engineering data
- PARTcommunity embedded – seamless integration of the 3D CAD models download portal into the websites of companies
- Smart Sales – Offering the right part at the right time at the right place to the right person
- 3D CAD models app – mobile access to millions of standard & purchased parts
- BIMcatalogs.net: Worldwide marketing of your building components to civil engineers and planners
- Support for augmented reality and virtual reality
- Seamless transition to the procurement process with RFP (request for proposal)
- Engineering knowledge database

Further information about the latest innovations and the company can be found on our website at:

www.cadenas.de.
The platform improves the communication to external suppliers.

**The Strategic Parts Management**
Sustainable cost reduction of standard, supplier and company parts for engineers and purchasers.

**The Geometric Similarity Search**
Find available CAD geometries in a smart way and classify them semi-automatically.

**The Supplier Portal**
The platform improves the communication to external suppliers.

**The PURCHINEERING Concept**
Improves the cooperation between purchasing and engineering.

**The Intelligent CAD Models**
More than geometry: Optimal product and engineering data with the maximum comfort and functionality.

**The Smart Sales Solution**
Know who and where your customers are: Offer products at the right time, right place and to the right people.

**The Vertical Marketplaces**
Numerous online marketplaces with millions of users to multiply your Electronic CAD Product Catalog.

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