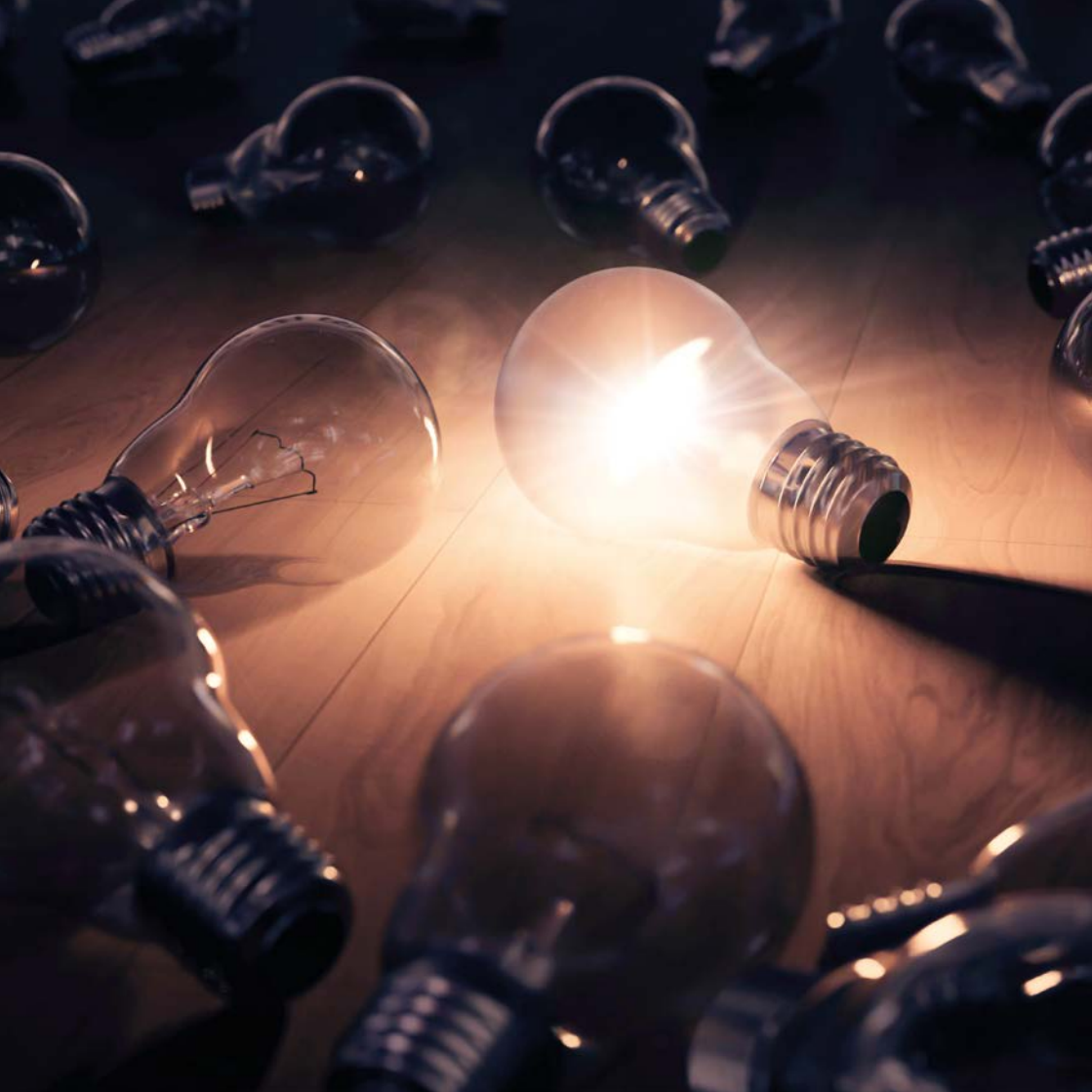




CAS Configurator Merlin

In a nutshell





Preamble

To help you find the right function within CAS Configurator Merlin quickly and easily, we created this little manual.

It provides you with an overview of the various functions and basic concepts of CAS Configurator Merlin and lets you perform your tasks more efficiently with best practices and shortcuts

Overview



M.Core:

Basic system consisting of server and computing core

M.Sales:

Ergonomic and intuitive for sales – The intuitive user interface enables sales staff to configure products quickly and error-free

M.Doc:

Efficiently generated documents – At the push of a button, offers and other configuration-dependent documents are automatically created

M.Variety:

Visual variant management with the toolbox – the entire spectrum of product variants is visible and evaluable at a glance

M.Customer:

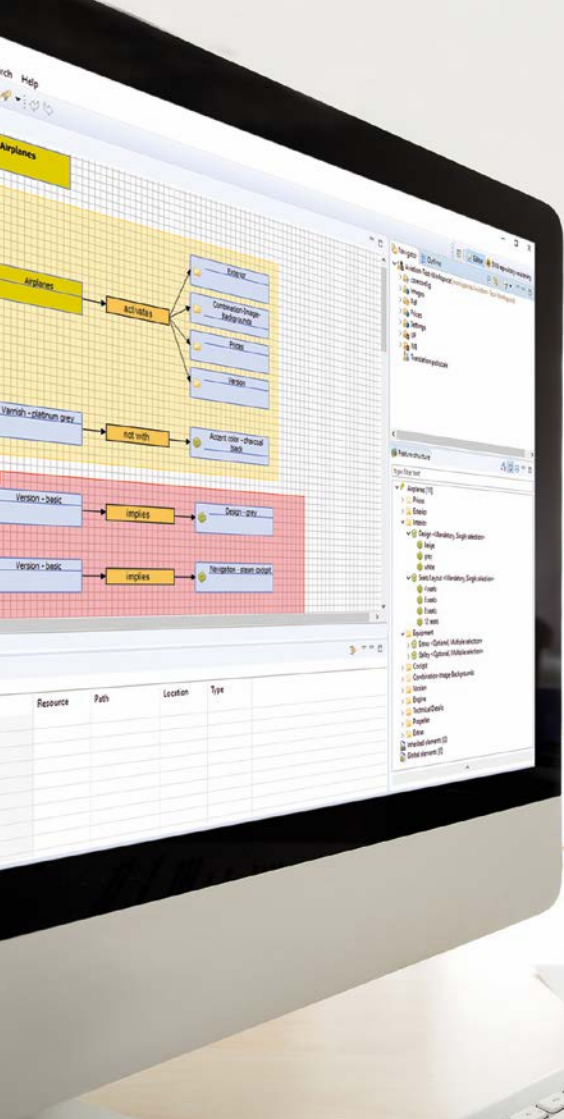
With a few clicks to the customer-specific product – With M.Customer your customers can configure products themselves

M.Model:

Graphical editor captures product knowledge – product managers and engineers can intuitively map product variants and dependencies, even without programming knowledge

CAS genesisWorld:

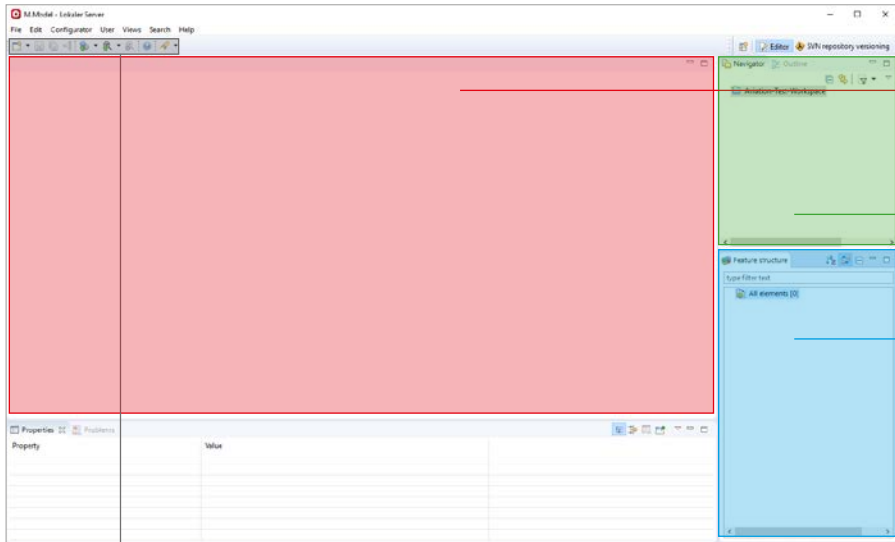
Seamless integration of the CRM system CAS gW – the central database of customer and product data optimizes the sales and offer process



1. The graphical editor M.Model

A basic module of CAS Configurator Merlin is M.Model, which is used as a graphical editor to capture product knowledge. M.Model is used to create and manage sets of rules for product variants, e.g. through dependencies. These graphically or tabular displayed sets of rules can be created without programming knowledge and serve as a basis to be able to easily, quickly and error-free configure products in M.Sales, the module for sales employees.

1.1. First steps



editor area

this is where the graphical rule modeling takes place

navigator and outline view

display of the files from the workspace in a folder structure

feature structure

depending on the elements of the editor area

palette



Format rule file



Upload set of rules



Display help



Search

1.2. Modeling basics M.Model

The screenshot displays the MModel software interface, which is used for modeling feature models. The main workspace shows a diagram of the 'Aircrafts' feature model. The diagram is organized into two main sections: 'Disable' (yellow background) and 'Enable' (red background).

Disable Section:

- The root node is 'Aircrafts'.
- 'Aircrafts' has a relationship 'activates' with a group of features: 'Exterior', 'Combination-Image-Backgrounds', 'Frame', and 'Insign'.
- '_aircraft_paint_grey' has a relationship 'not with' with 'Accent color - charcoal black'.

Enable Section:

- 'version_basic' has a relationship 'implies' with 'Design - grey'.
- 'version_basic' has a relationship 'implies' with 'Navigation - altan cockpit'.

Feature Structure (Right Panel):

The feature structure tree shows the hierarchy of features and their relationships:

- Aircrafts [1]
- Prices
- Exterior
- Insign
- Design <Mandatory, Single selection>
 - Image
 - grey
 - white
- Navigation <Mandatory, Single selection>
 - 4 seats
 - 8 seats
 - 8 seats
 - 12 seats
- Equipment
 - Interior <Optional, Multiple selection>
 - Salley <Optional, Multiple selection>
 - Cockpit
 - Combination-Image-Backgrounds
 - Version
 - Engine
 - Technical Details
 - Propeller
 - Extras
- Inherited elements [0]
- Global elements [0]

Operator

Meaning

General operators

„based on“

The element on the left inherits the feature structure and rules of the knowledge module on the right.

„implies“

The selection of the element on the left side requires the selection of the element on the right side.

> The element to be implied is automatically added in M.Sales and cannot be deselected by the user.

„activates“

Selecting the element on the left activates the feature/feature folder on the right.

> Activated items are displayed in the configuration form in M.Sales.

„not with“

The selection of the element on the left side excludes the selection of the element on the right side.

> The element on the left side cannot be combined with the element on the right side in the configuration.

„only with“

The element on the left can only be combined with the feature values on the right.

> Other attributes of the features on the right side are excluded and cannot be combined with the element on the left side.

„corresponds“

You can use this operator to use both conditional elements and other elements.

„show hint“

If the element on the left side of the rule is selected, the hint text is displayed in the configuration form below the element on the right side of the rule.

> A hint text is displayed under an element in M.Sales.

„set mandatory“

The selection of the element on the left side sets the selection of the feature on the right side mandatory.

> The mandatory feature must be selected in M.Sales to complete the configuration.

„comment“

A comment is displayed as a notification in M.Sales when an item is selected.

> The operator can only be used on the left side of the implies operator.

Input operators

„default“

A variable is assigned the value of the constant operator or another variable.

The default operator is also used to assign a user input to a variable.

„constant“

This operator adopts a certain value and can be assigned to a variable.

„user input“

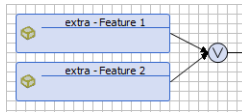
A text field is created for a user entry in M.Sales. The variable assumes the value of the user input.



Truth tables:

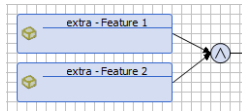
A truth table is a tabular listing of the truth value progression of a logical statement.

Logical OR:



A	B	A v B
true	true	true
true	wrong	true
wrong	true	true
wrong	wrong	wrong

Logical AND:



A	B	A ^ B
true	true	true
true	wrong	wrong
wrong	true	wrong
wrong	wrong	wrong

1.3. Functions

1.3.1. Overview M.Model

function	description
dependency graphs	Graphical representation of the relationship between products and knowledge modules as well as between knowledge modules and knowledge modules.
offer parameters	Feature elements without a predefined value whose value is determined by an external system or a user entry in M.Sales.
quantity variables	Specification of a number for the multiple selection of an attribute in the configuration.
workspaces	Folder in the file system for storing projects and the files they contain.
disabling rules	A rule is deactivated. This offers e.g. the possibility of better testing individual areas of modeling.
attributes	Feature elements that represent a property of a product.
conditional elements	The value of these elements can be either true or false, to link offer parameters to a condition.

user interface	Automatically generated representation of the product and rules defined in M.Model. The sales employee can individually compile products desired by the customer and automatically generate documents, e.g. offers.
document modeling	Modeling the composition and content of a Word document using e.g. text modules and placeholders.
Group and sort	Determining the sequence of products and feature elements in M.Sales.
validity periods	Determination of the period of time in which an element or rule is valid.
inspection mode	Mode for displaying rules that are currently active for a current configuration. This mode can e.g. help to identify areas of the modeling that do not work as desired.
cardinality	Determination of the number of elements in M.Sales that may be selected at least and/or at most.
marketing texts	Texts that are stored in a translation table for products, knowledge modules or feature elements and are displayed by clicking the element or moving the mouse pointer over it.

features	Modules for modeling rules that contain values or variables.
feature folders	Components for a clear and easily comprehensible presentation of product information such as attributes, values and variables for structuring information.
prices	Wide range of options from simple to complex price calculations.
product descriptions	Collection of all relevant product description information in different languages, e.g. description texts, images and documents for a product.
products	Sales product that is offered to the customer. A product always consists of feature elements and a rule file that describe the product in detail.
product tables	Maintenance of tabular rules in the mass format of the table with import function from excel files.
projects	Storage possibility of all information and files, which stand in connection with the respective project.

permission groups	Groups to which certain authorizations are assigned.
rule files	Files in which graphical rules are modeled in M.Model.
rule modeling	Graphical or tabular rule modeling as core function of M.Model.
tabs	Controls on a graphical user interface to navigate through multiple windows within a file.
regression tests	Repetition of test cases to ensure that modifications in already tested parts of the modeling do not cause new errors („regressions“).
text modules	Basic components for document modeling in which all texts for document generation are managed. The relationships to the features from the configuration are maintained in the corresponding rule files.
translation tables	Elements in which the translations for all interface texts (e.g. product names, features, etc.) for M.Sales are managed.

variables

Attributes without predefined value. A variable is always subordinate to a feature. An attribute is assigned by a user entry in M.Sales or by a rule in M.Model. The value range of a variable can be restricted using a rule.

knowledge modules

Storing shared product knowledge that is relevant to multiple products, usage as component for products.



1.3.2. Best Practices: Solutions and Troubleshooting

Inspection / Debug Mode

The inspection mode allows you to reproduce the modeled rules in M.Model. This mode enables you to examine a current configuration in M.Sales. The rules and elements in M.Model are highlighted in color on the rule files that are currently active and effective in the status of this configuration.

This can provide initial information on where a potential source of modeling errors can be found. To start the inspection mode, upload the work space to an inspection client and inspect the current status by clicking on the inspection button on the right. The currently valid rules then turn green, the invalid rules become greyed out.

Disabling rules

By deactivating rules, the area in which an error is present can be restricted. For this purpose, the user gradually excludes more and more functioning areas as a source of error by deactivating rules, thus gradually approaching the source of error.

To deactivate a rule, select the rule you want to deactivate and right-click in the context menu to select „deactivate rule“. The selected rule is greyed out and switched off.

1.3.3. Shortcuts

command	keyboard shortcut
deselect connecting operator	ESC
open dynamic help	F1
open tutorials	F10
copy	CTRL + C
save	CTRL + S
print	CTRL + P
format rule file automatically	CTRL + R
insert	CTRL + V
redo	CTRL + Y

undo

CTRL + Z

open file

CTRL + O

open search

CTRL + H

open new item wizard

CTRL + N

quick edit

CTRL + 1

open „outline“ view

ALT + shift key + Q > O

open „problems“ view

ALT + shift key + Q > X

save all

CTRL + shift key + S

open search window

CTRL + shift key + T

upload to sandbox

CTRL + ALT + U

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Home | Cockpit | Catalog | Quote | Configuration

Product description



2018

Quote overview [View](#)

7 PKW

EUR27.400,00

Product from catalog

CAR OF THE YEAR Our latest car model – individual

New customer: EUR27.400,00 Regular customer: EUR26.950,00

Configuration

Tab 1

Product details

Color

Desired color

Red (+EUR0,00)

White (EUR1.200,00)

Engine

Engine

85kW (EUR21.000,00)

PS

120PS

Transmission

Manual

Automatic (+EUR300,00)

Fuel

Petrol (+EUR250,00)

Diesel (+EUR550,00)

Gas (+EUR1.200,00)

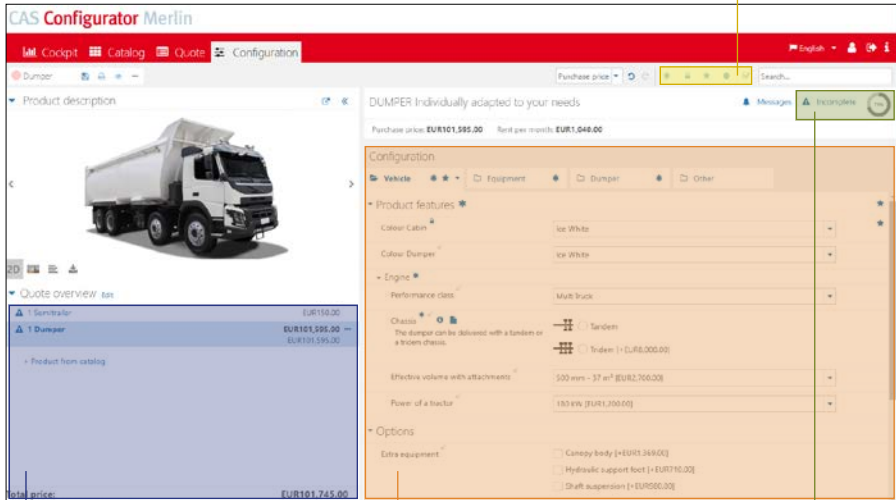
2. M.Sales

The module for the sales representative to configure products is M.Sales. With M.Sales product variants can be configured quickly and easily using the rules modeled in M.Model. The intuitive user interface makes it possible to put together the ideal product step by step and then – with the help of M.Doc – generate suitable and error-free documents, such as offers for the customer or specifications for your own production.

2.1. First steps

Filter option

Mandatory fields or changes in last step



Product positions

Configuration area

Progress bar

Depending on mandatory fields

* Mandatory field

2.2. Functions

2.2.1. Overview M.Sales

function	description
change dialogs	Notification windows in M.Sales that show a change in the rule world of the current configuration.
alternative dialogs	Information window in M.Sales to show an alternative selection option based on a selection made.
generation of documents	Easy and fast creation of professionally checked documents with the help of M.Doc – e.g. offers for the customer or specifications for your own production.
configuration	Fast and error-free product configuration, i.e. compilation of customer-specific products.
discounts	Various discount regulations.
SmartSearch	Quickly find features in the configuration form that can be selected or deselected directly via SmartSearch.
save configurations	Storage of configurations for later reuse or editing.



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