



Smart Relations between Content and Spare Parts Information

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About me



Karsten Schrempp
Founder and Managing Director

”

With over **25 years of experience** in the development and implementation of customised solutions, I passionately advise clients in the field of **technical communication.**”

About PANTOPIX

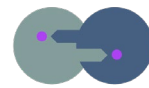


Turning information into value - Intelligent solutions for technical communication.



Consulting

- Analysis of information, systems and processes
- Data models
- Service processes



Implementation

- Knowledge Graphs
- CCMS, CDP, PIM etc.
- XML, DITA, iIRDS
- Interfaces



Operations

- Cloud-based service
- Infrastructure

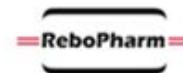


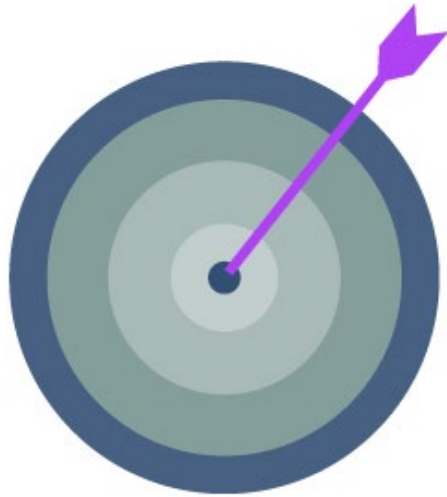
VOITH



SARTORIUS

Honeywell



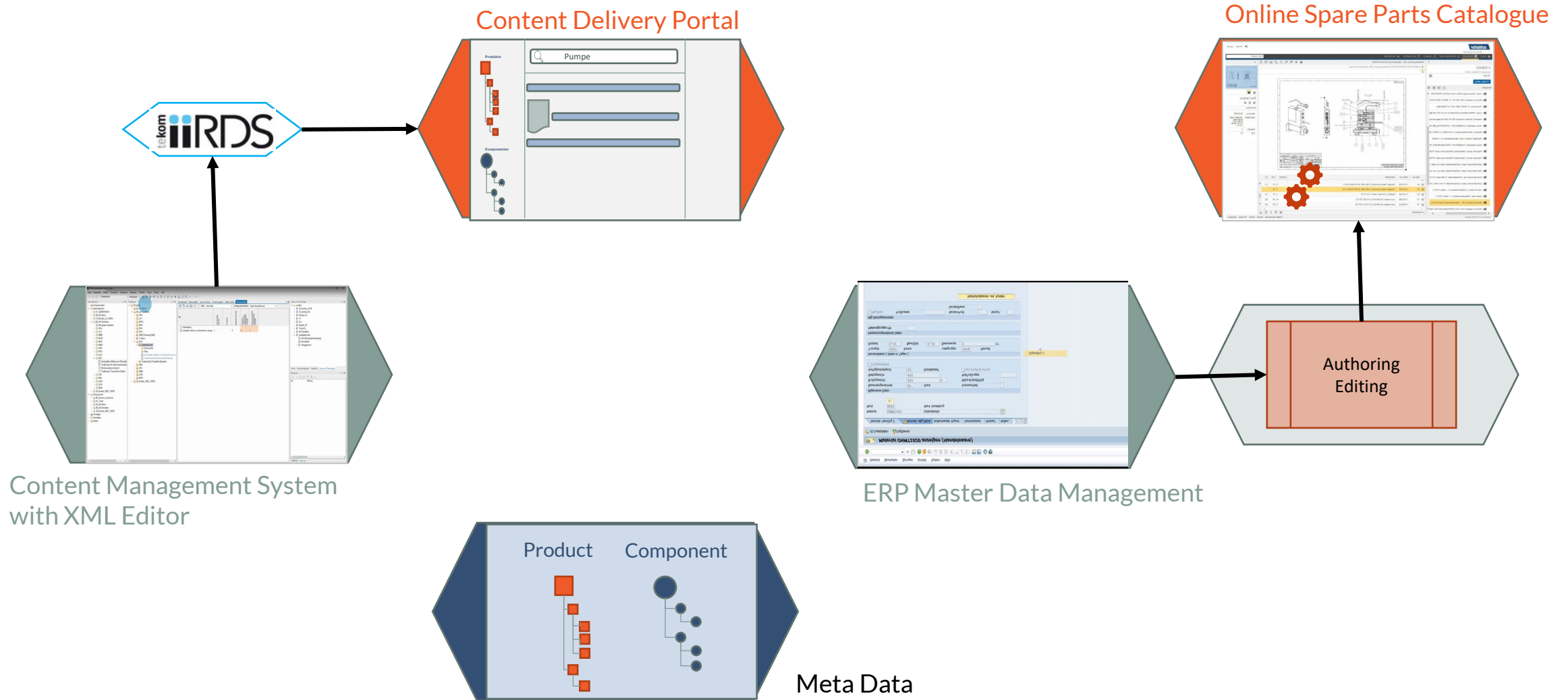


Spare parts and topics always lead us to two questions:

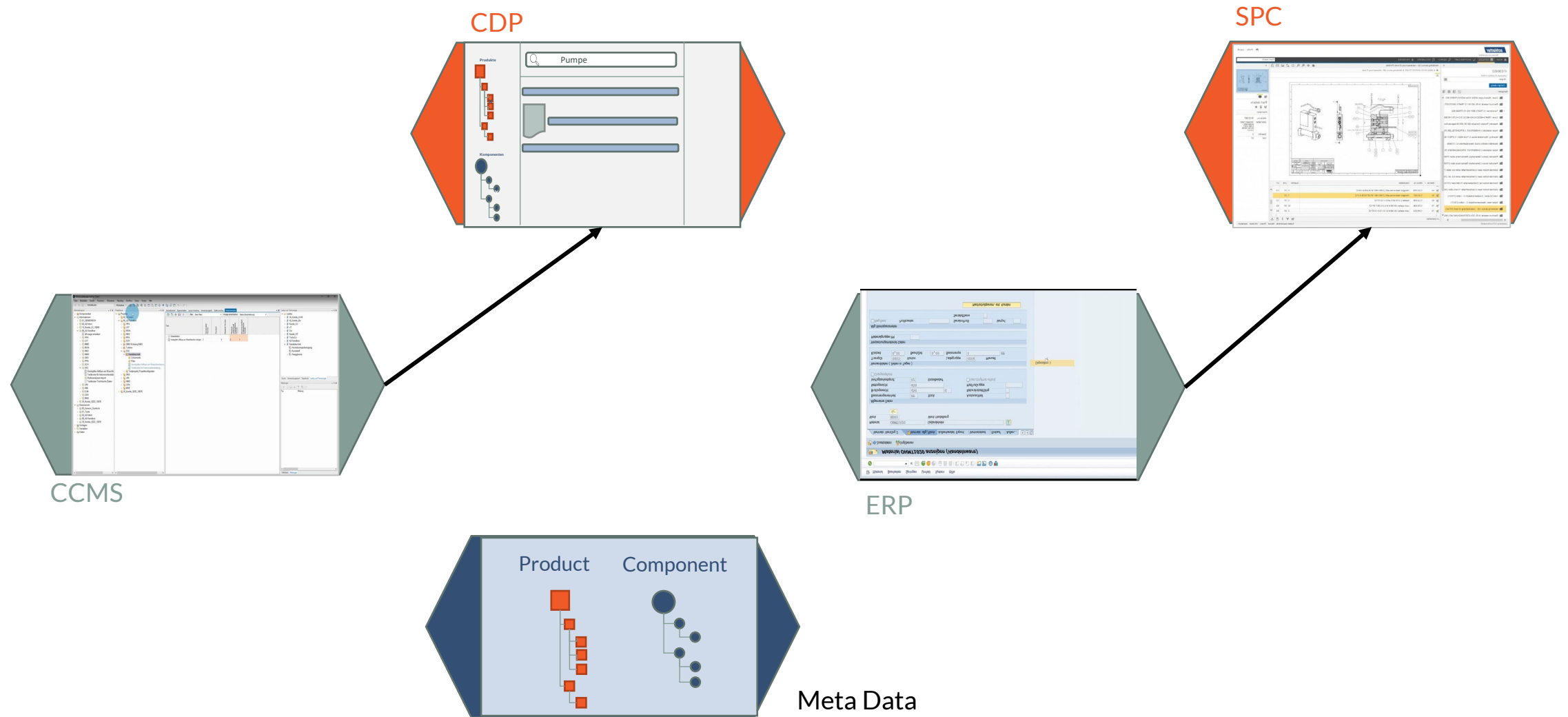
- How do we bring this content together without creating an endless maintenance and updating effort?
- Are there ways to link this information generically in such a way that the corresponding references are inserted correctly or a direct link is created in online publications?

We answer these questions.

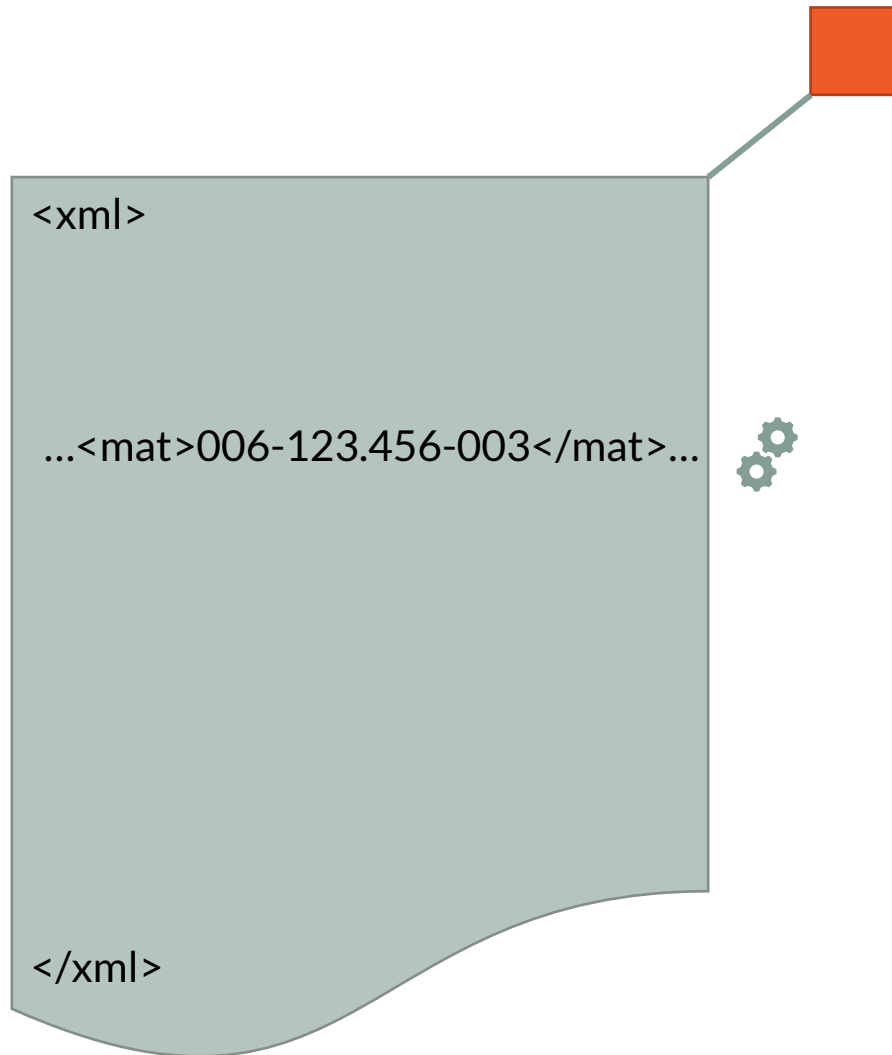
Our Content Delivery World(1/2)



Our Content Delivery World (2/2)

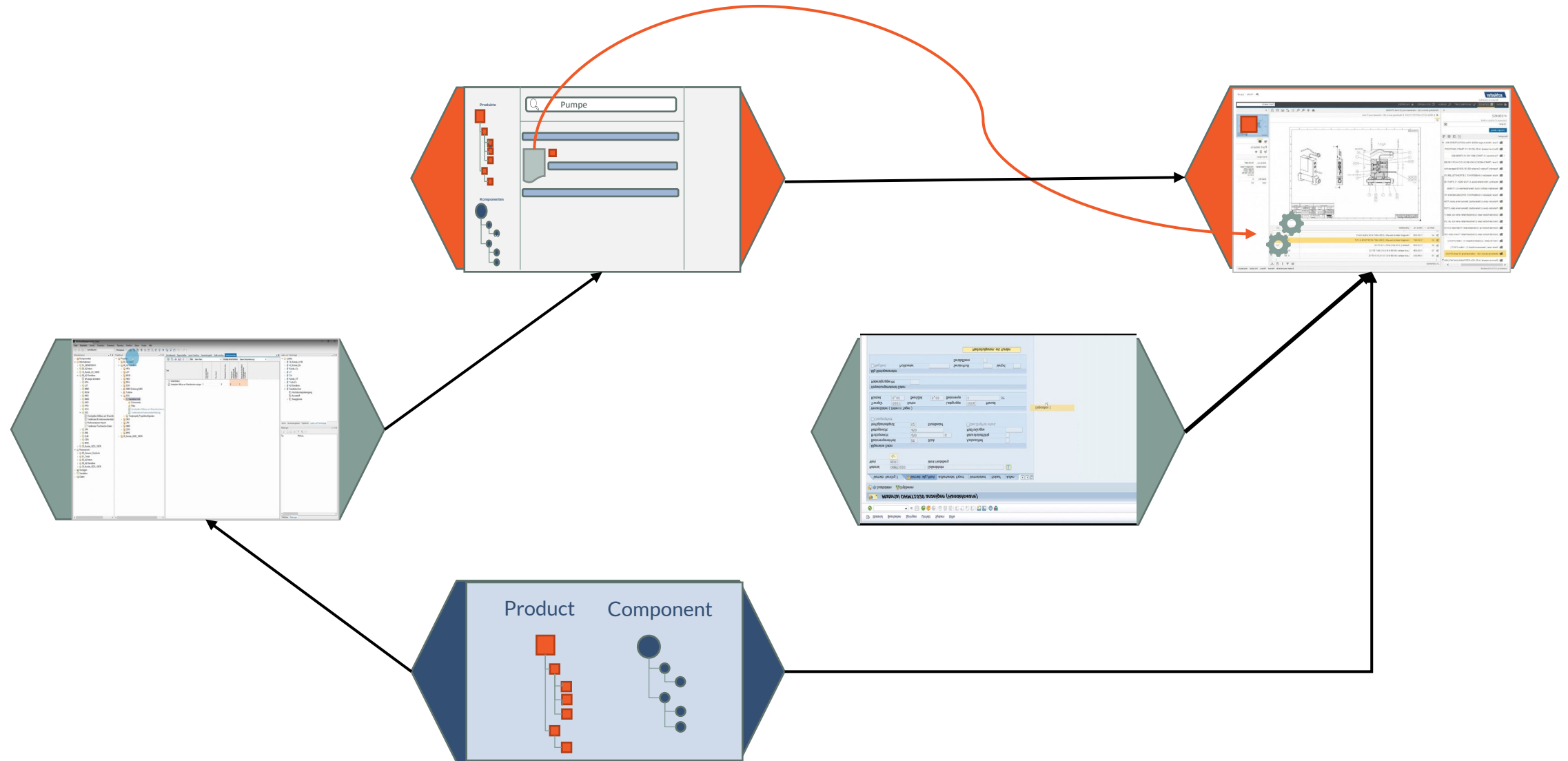


Link Spare Parts (1/3)

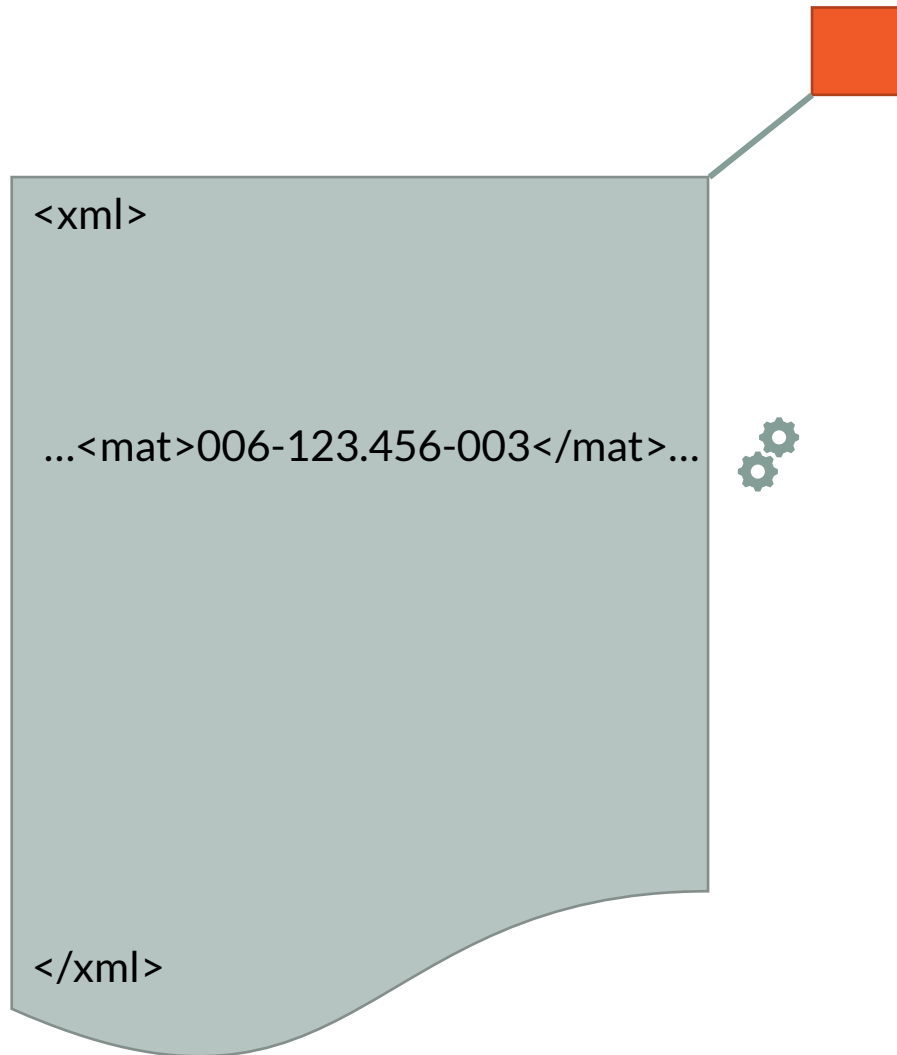


- The topic contains an inline element with a material number.
- In the publication process, the inline element is converted into a link.
- The link goes directly into the product-specific SPC to the relevant spare part.

Link Spare Parts (2/3)



Link Spare Parts (3/3)



Advantages:

- If the information is correct, this is the most accurate reference.

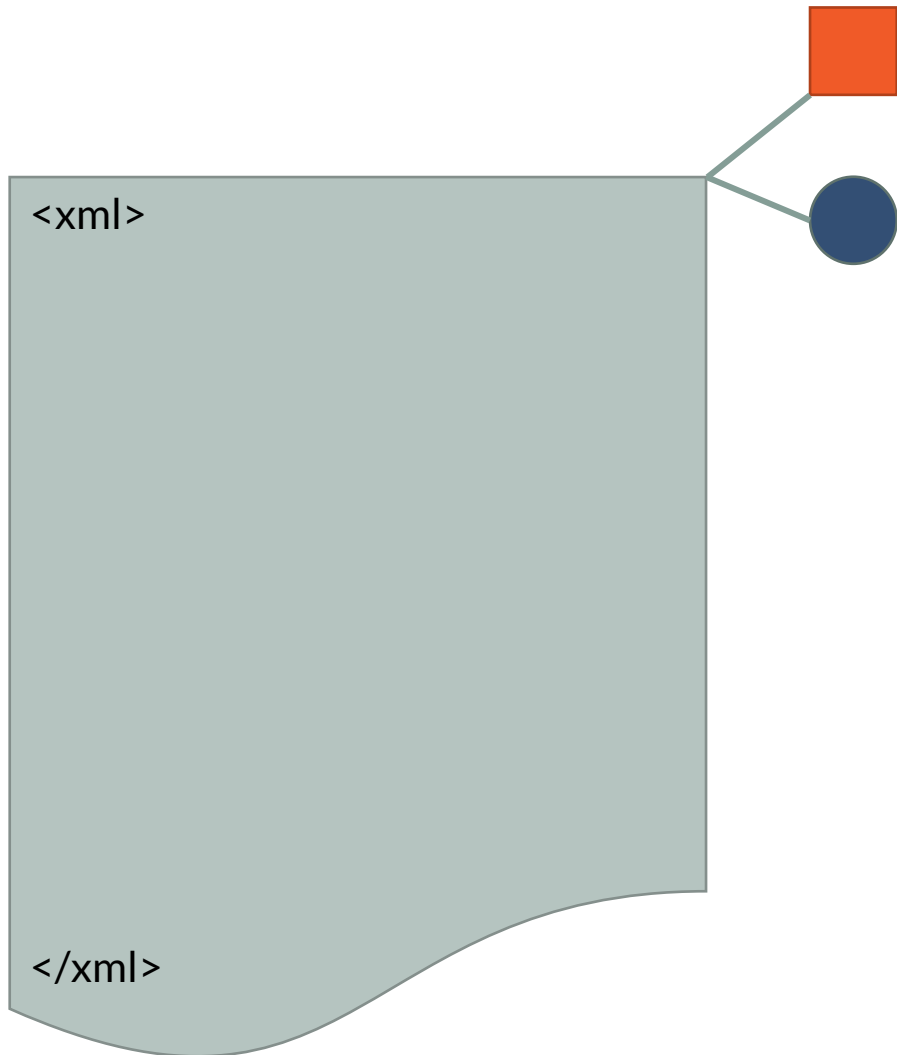
Disadvantages:

- Difficult to keep up-to-date, correctness
- If the topic is valid for several product variants, but the spare parts (numbers) differ, you need a variant management that quickly becomes confusing:
 - Copy of the topic [not a good idea!]
 - Variant management on the inline element or structure fragments in the CCMS.

Way out:

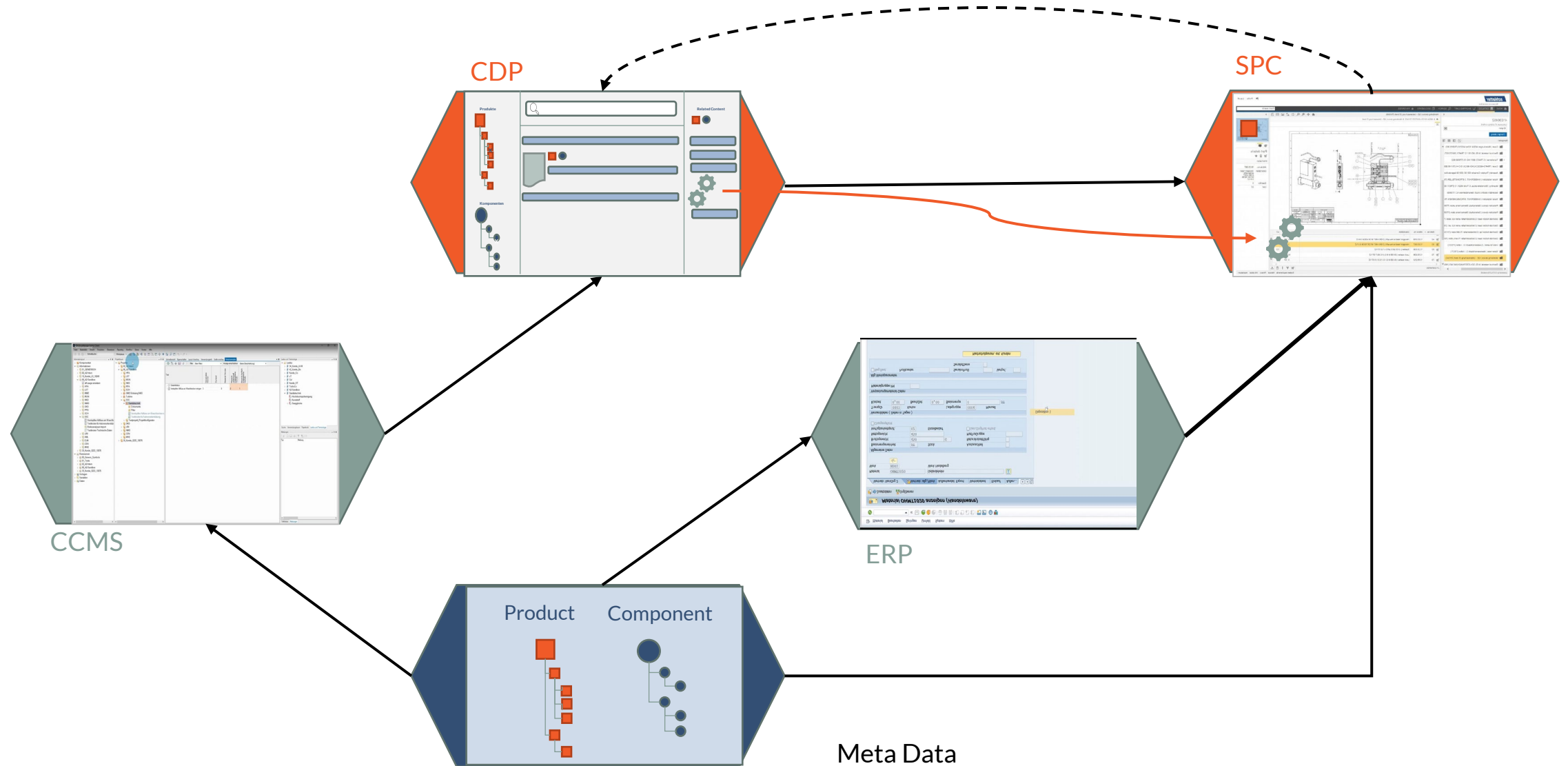
- Offer spare parts via Related Content
- Generic spare part names

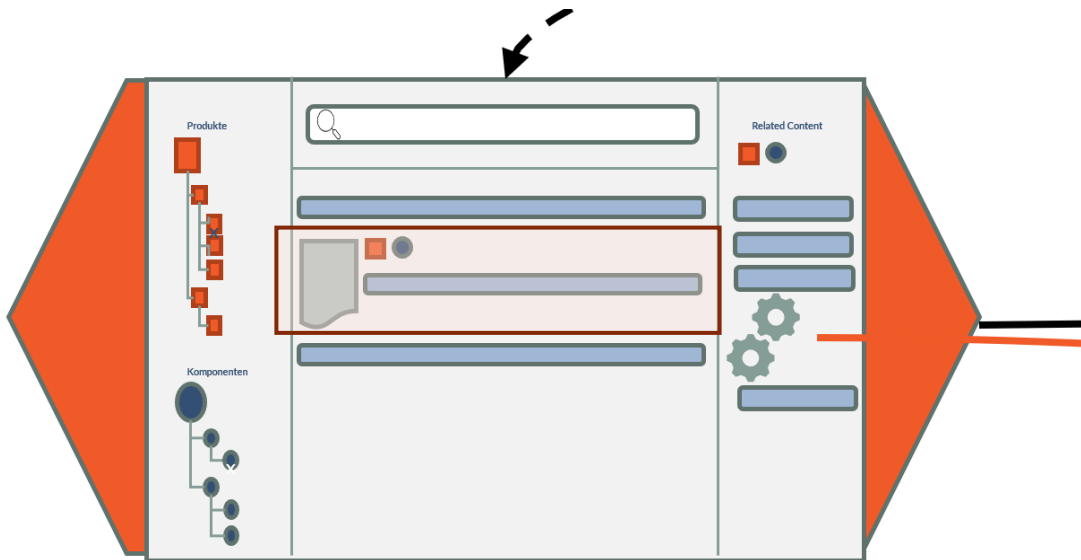
Offer spare parts via Related Content (1/3)



- The topic does not contain references to a specific spare part.
- The topic is classified for a product and a component.
- The component classification is maintained in the master data for the spare parts.
- The spare parts are published from the master data or from the spare parts catalogue in the Content Delivery Portal, including a valid link.
 - The spare parts in the portal must be classified with the product and the component (this is done automatically, if the data are available in the SPC).
- In the portal, the spare parts can be displayed as related content, with a jump to the spare parts catalogue.

Offer spare parts via Related Content (2/3)





Advantages

- Generic approach
- Possibly other information such as sales statistics can also be evaluated.
- If your spare parts catalogue can do this, you can jump from the spare parts to the topic via the metadata.

Disadvantages:

- The technician is not offered a specific spare part.
- Maintenance effort in the master data

Link spare parts via generic spare part names 1/4)

Material Description	Generic Name
Solenoid valve MEBH-5 /2-1/8-SB 173007	Valve
vacuum slide DN80 12138-YA24-AAP1-VAT-	Slide
valve MH1-A-12VDC-C-PI-2V-PCD-QC-AC-BU	Valve
CCD-Camera with Objective	Camera
CCTV-Objektiv VML-120	Objective
Ext.Cable USB3.0 A/B+Ferrite 3.0m	Ext Cable
Ext.Cable USB3.0 A-9St/MB-9St angl. 5,0m	Ext Cable
Navigation Camera, 200mm Airlock	Camera
Navigation Camera, 5/6 Axis Stage	Camera
Navigation Camera, 80mm Airlock	Camera
USB2 uEye XS IndustrialCamea/IDS IMAGING	Camera
USB3 Vision camera mvBlueFox3-1031	Camera
Adapter f/DN40KF at 52mm MP-port	Adapter
Adapter flange 32mm MP port f/Evacatron	Adapter Flange
Adapter flange EDX DN40-KF f/Evacatron	Adapter Flange
Adapter flange L14,5mm	Adapter Flange
Blind flange EDX port	Blind Flange
Blind flange f/32mm-MP-port	Blind Flange
Blind flange f/airlock specimen chamber	Blind Flange
Blind flange f/EDX-port NEON II	Blind Flange
Flange kit 66mm multi-purpose port	Flange Kit
Flange kit 72mm MP port f/STEM detector	Flange Kit
Flange kit f/ 4QBSD	Flange Kit
Flange kit f/ Versatile Port	Flange Kit
Flange kit for DN40KF - 52mm MP-Port	Flange Kit
Aperture Mo d400Åµm	Aperture

Idea:

- We define the generic spare part name from the short text of a material in such a way that the spare part remains recognisable, but we abstract from all details.

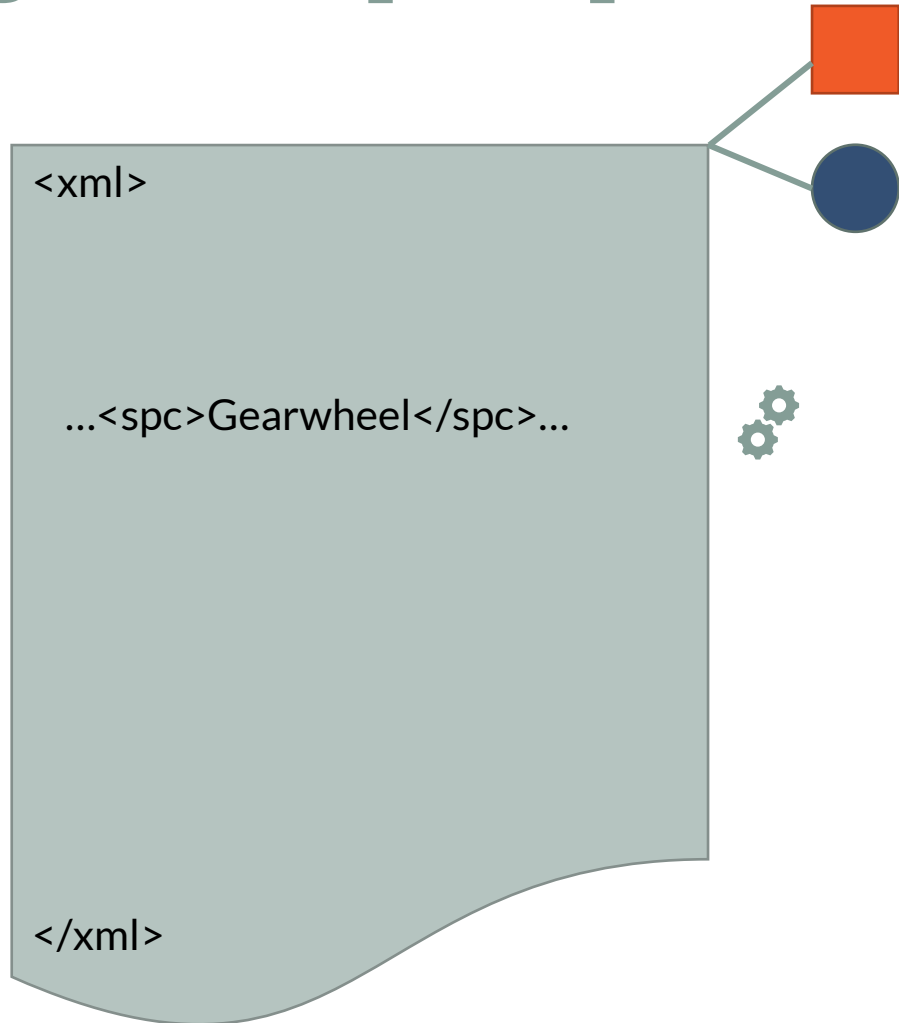
Impact:

- The author does not need to know material numbers or spare part names in detail.
- The generic spare part name is stable against product variants.
- We assume that there is only one or a few parts per component with identical and generic names.

List creation:

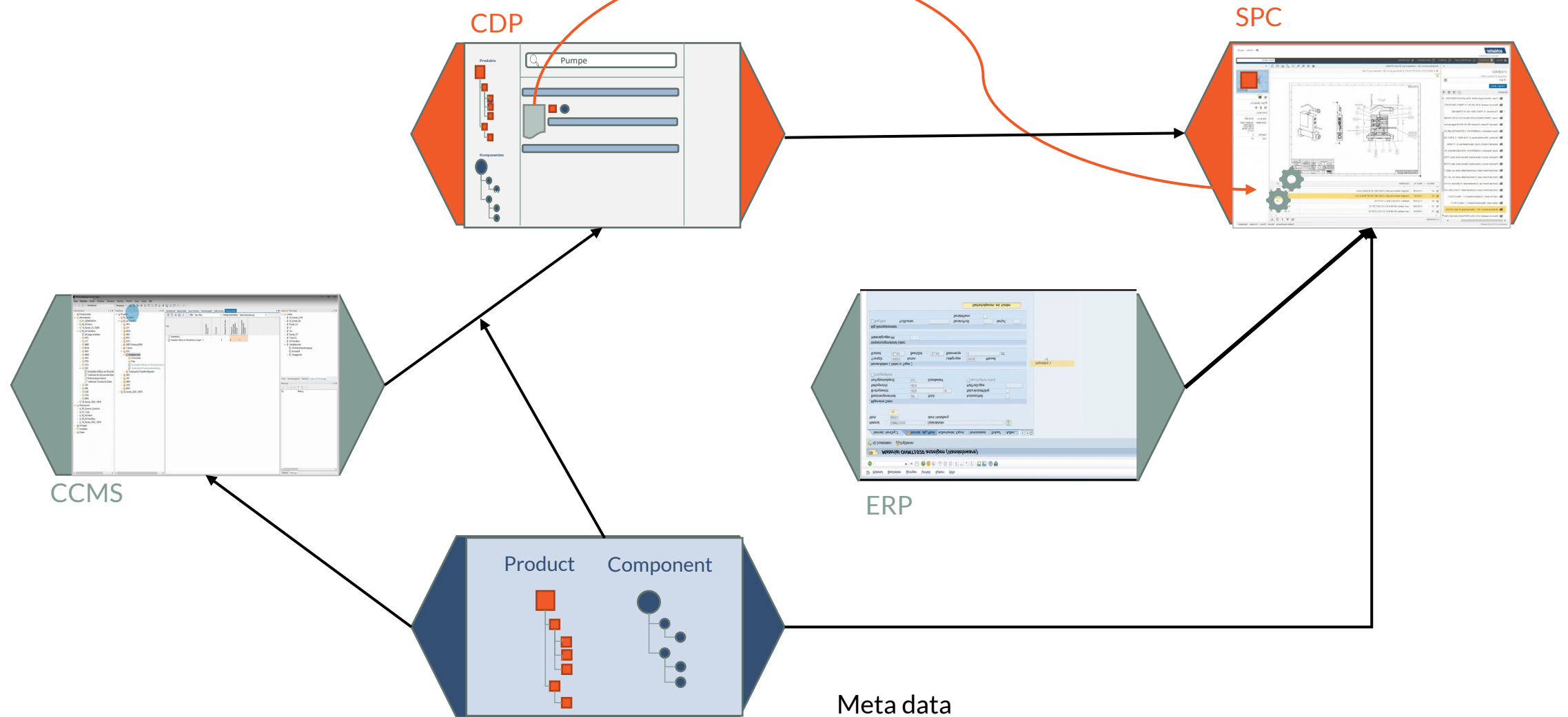
- Manually created list
- Entity extraction and revision with/without AI
- Store list persistently e.g. on the metadata platform
- AI based proceeding

Link spare parts via generic spare part names (2/4)

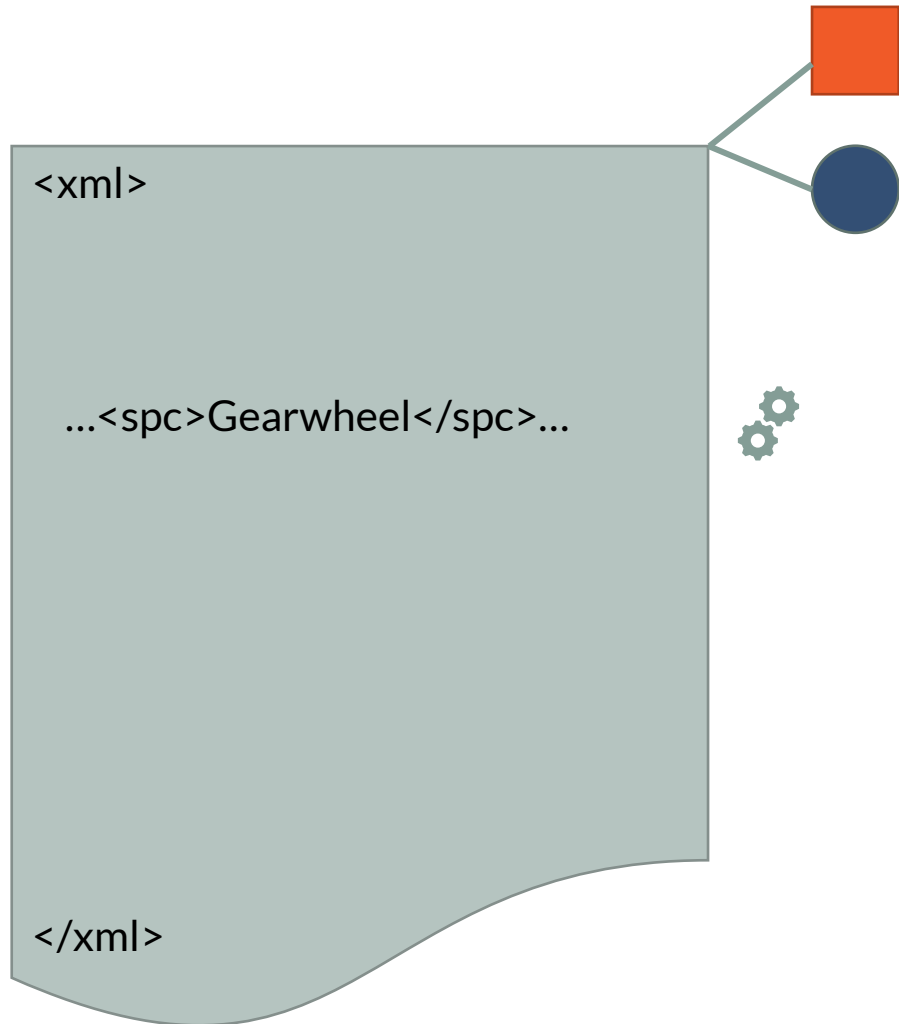


- There is an inline element for interpretation in the publication process.
- The topic is assigned to a product.
- The topic is assigned to a component.
- The publication process interprets the correct link via the classifications and the list (on the metadata platform).

Link spare parts via generic spare part names (3/4)



Link spare parts via generic spare part names (4/4)



Advantages:

- Simple authoring
- Stability against product variants, parts history and (slight) changes of material short texts.
- No variant management necessary

Disadvantages:

- Effort to create and maintain the list
- If the parts required for a topic do not belong to a component, the procedure does not work.
- Futur

... what now?

What do users usually need?

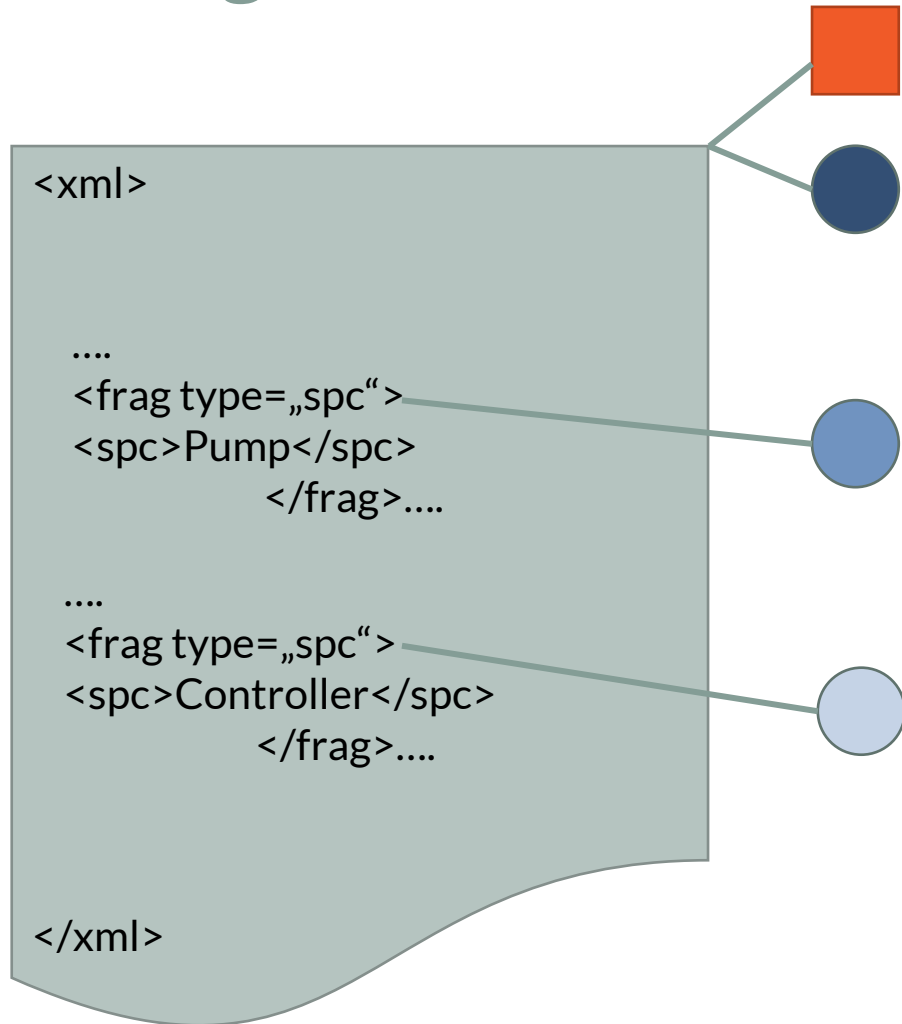


We check the user's need:

- For which or in which application is the list of spare parts needed for a topic or a major procedure?
- What information does the service technician (or other user) really need to prepare or carry out his job?
- Who knows the spare parts for a topic?
- What other information is available to us as a whole, e.g. from billed similar or identical orders?
- What can we automate?

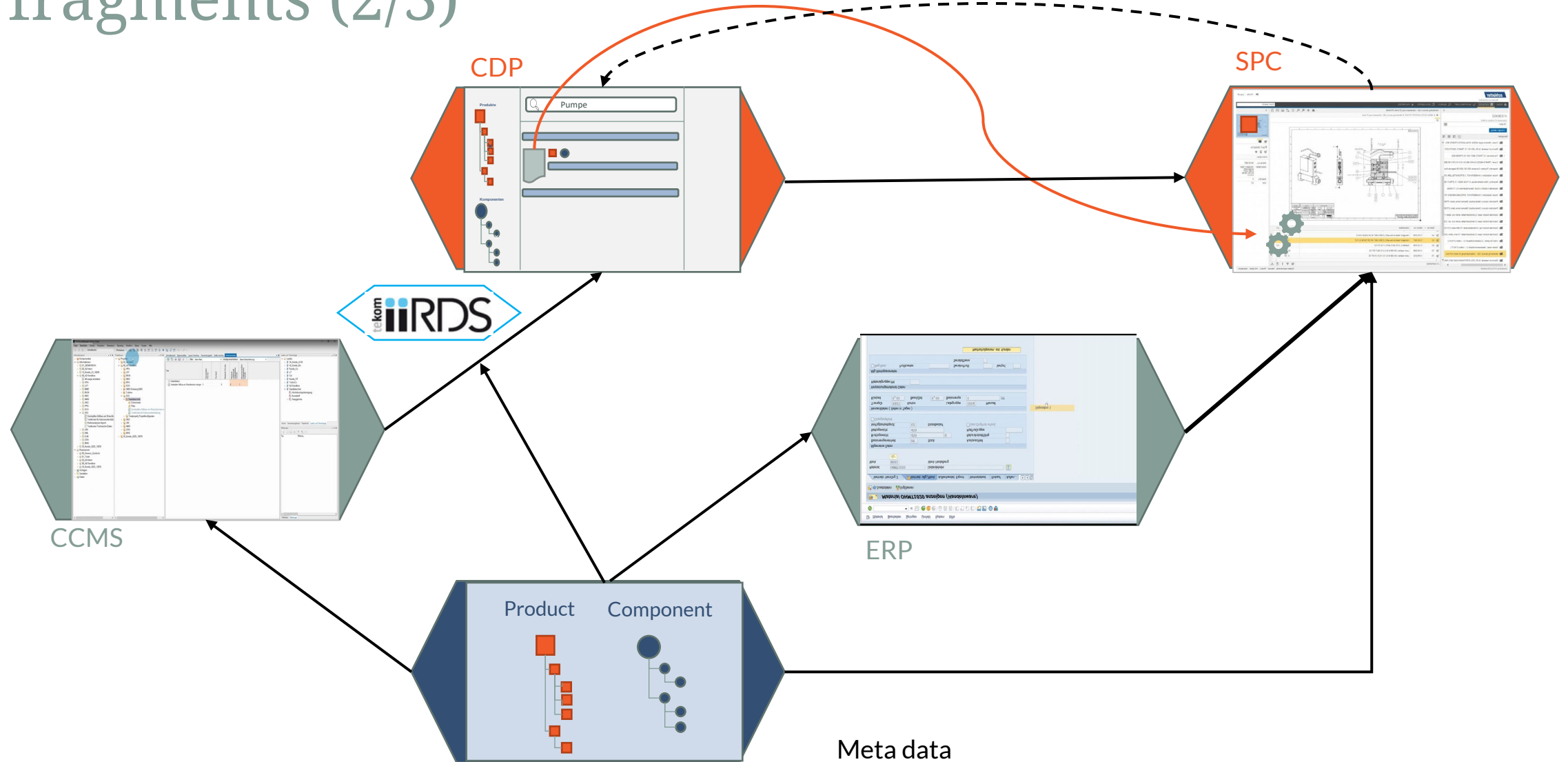
... because we can actually go a bit further.

Pack generic spare part names in fragments (1/3)

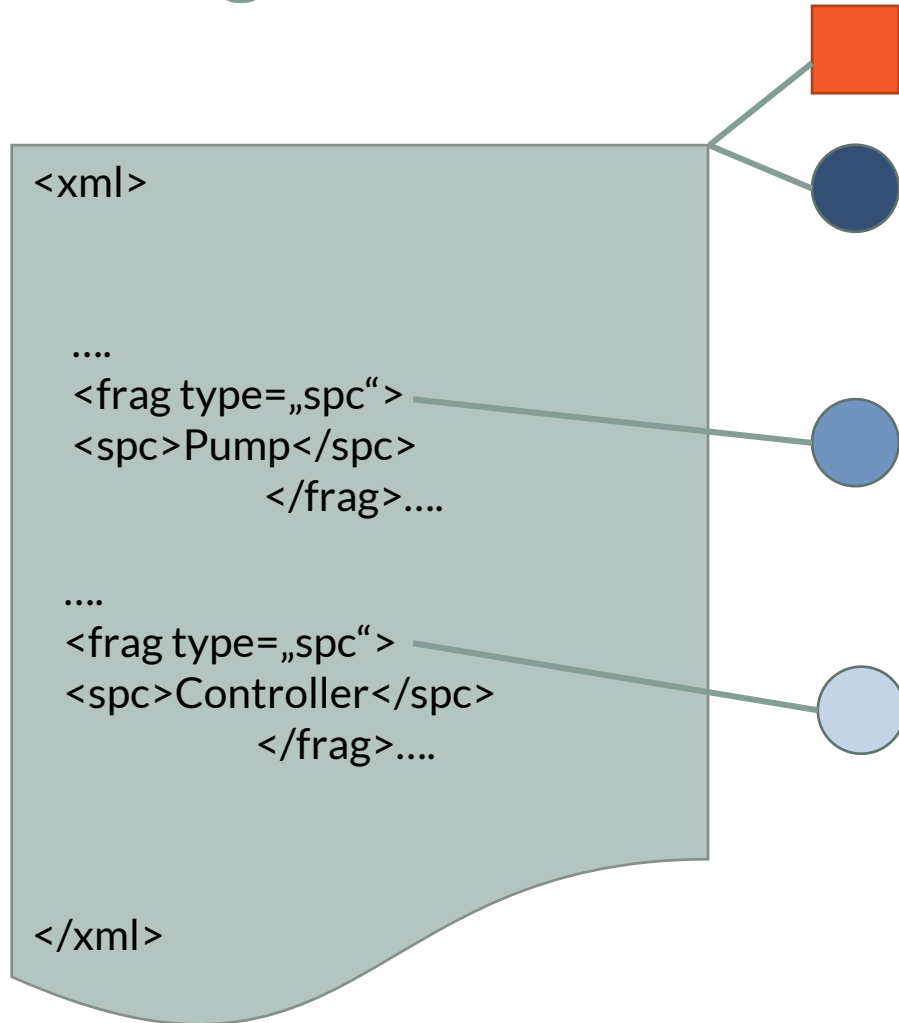


- There is a fragment and an inline element that can be interpreted during the publication process.
- The topic is assigned to a product.
- The topic is assigned to a component. [However, this is optional in this case].
- The fragments are typed, contain only the inline element for the generic name and, since they are objects in the CMS, are classified for a component.
- The publication process correctly resolves the link via the product, the component classifications of the fragments and the list to the generic names.
- We can publish this via iiRDS.

Pack generic spare part names in fragments (2/3)



Pack generic spare part names in fragments (3/3)



Advantage:

- High hit accuracy

Disadvantage:

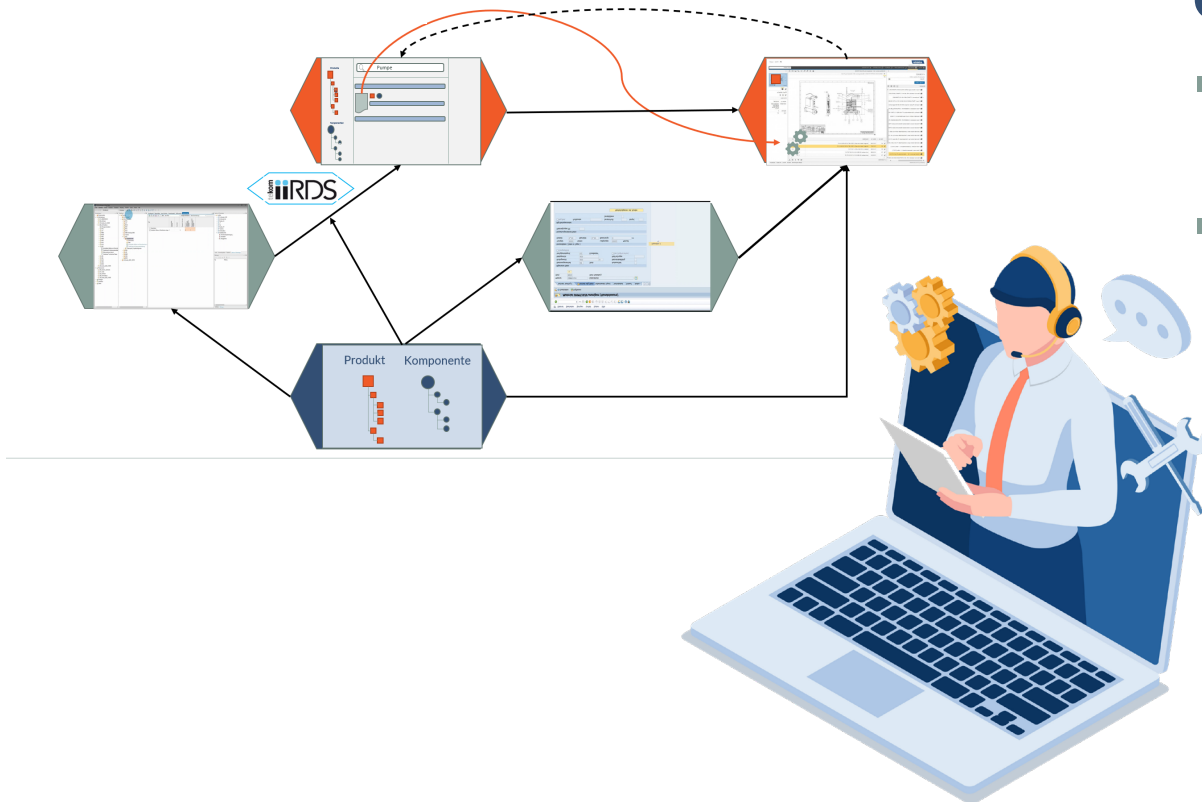
- High initial maintenance effort

Implementation:

- See how close you can bring the master data, the spare parts catalogue and the CMS together to automate.

Let's wrap it up

Connecting content and spare parts



Goal achieved?

- Check the real requirements and only use the approach you need - you can combine.
- Use appropriate metadata and all paths to automation!



Questions and Answers

Thank you for your Feedback!



Contact us



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