

Rules-Based Content Correlations

Making microDocs work
by Semantic Correlation Rules

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- Karlsruhe Univ. Appl. Sciences
Hochschule KA (Hska), Information Management & Media
- Institute for Information & Content Management (I4ICM)
Research Transfer: PI-Class, REx, CVM, Content Delivery, microDocs

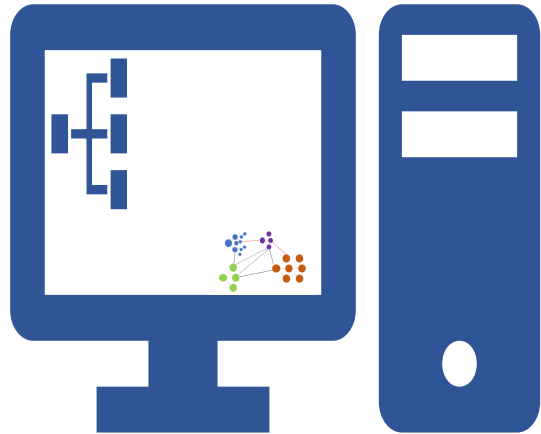
Agenda

Research & Development of Semantic Correlation Rules (SCR)

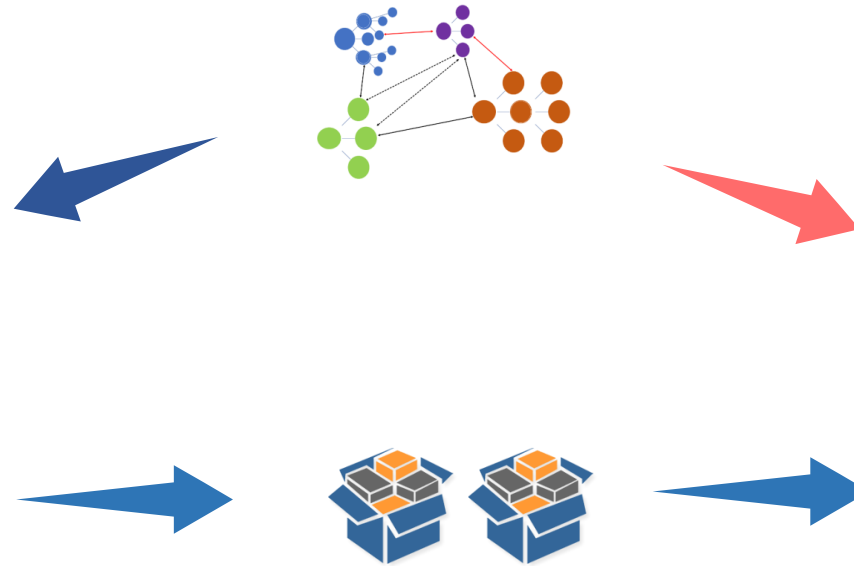
- (Re-)Introducing microDocs
- How to implement microDocs by SCR
- How SCR are implemented
- Summary

Re-Introducing microDocs

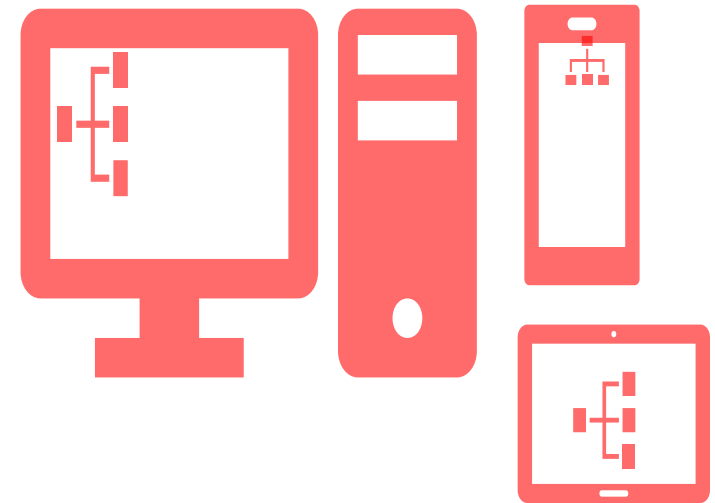
CMS



SMS



CDP



Introduction

Recent Situation in Information Management

- **Content Management**

as a standard technology for content creation and process automization

- **Content Delivery**

as a driver for content provisioning and digital information services

- **Semantic Modelling**

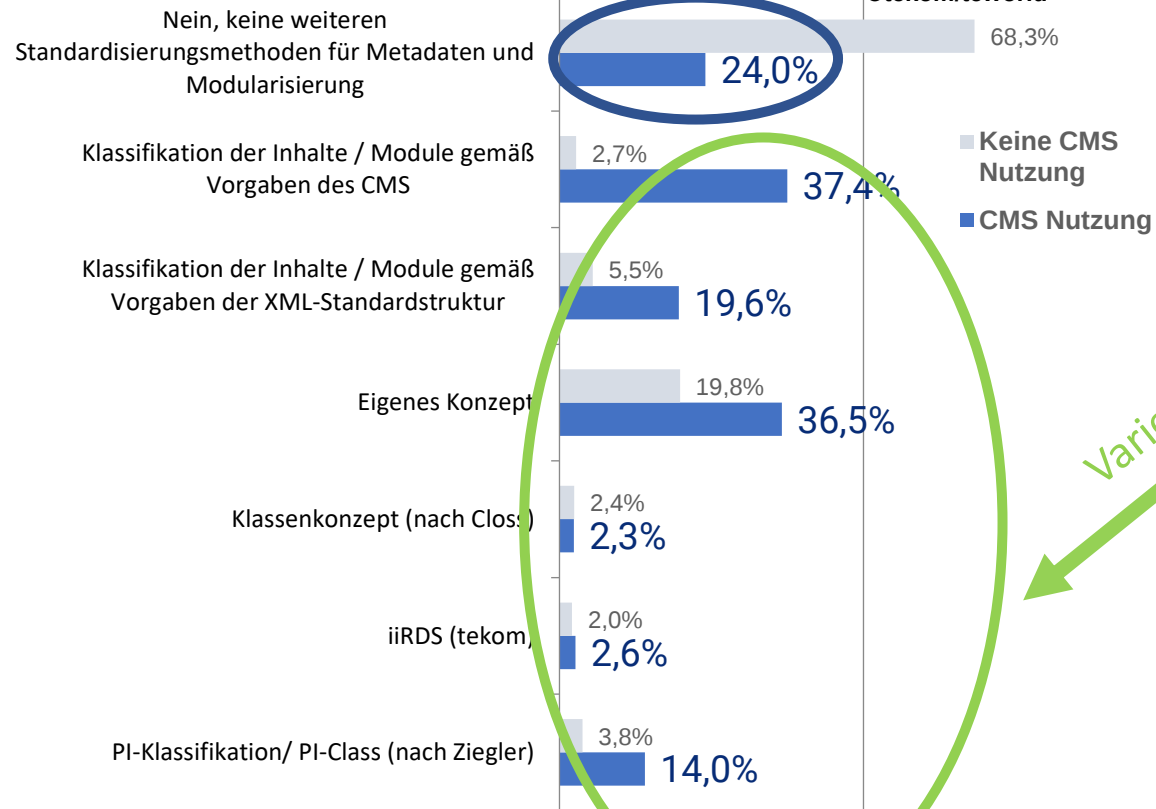
as an enabling technology for linked data, model-based engineering and
and for **sharing knowledge**

Market maturity / penetration

How Metadata are used in CCMS

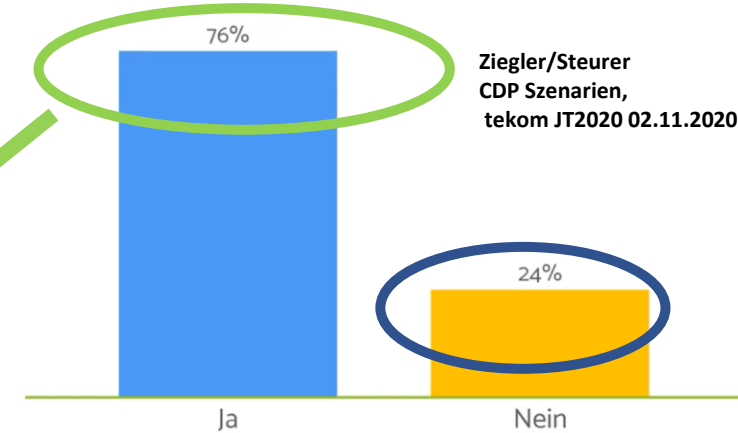
Standardization of Metadata

Straub/Ziegler 2019
©tekom/tcworld

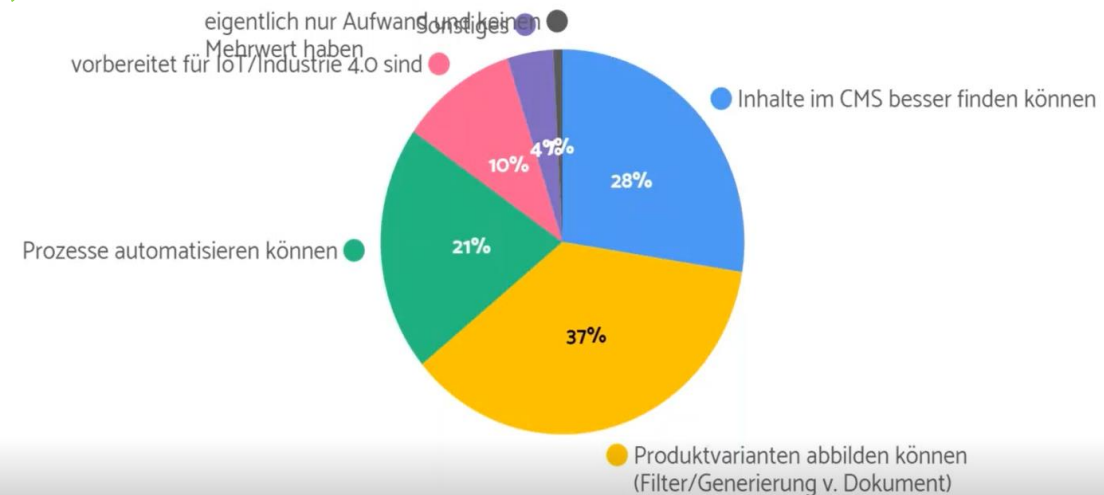


Use of Metadata

Ziegler/Steurer CDP Szenarien,
tekom JT2020 02.11.2020

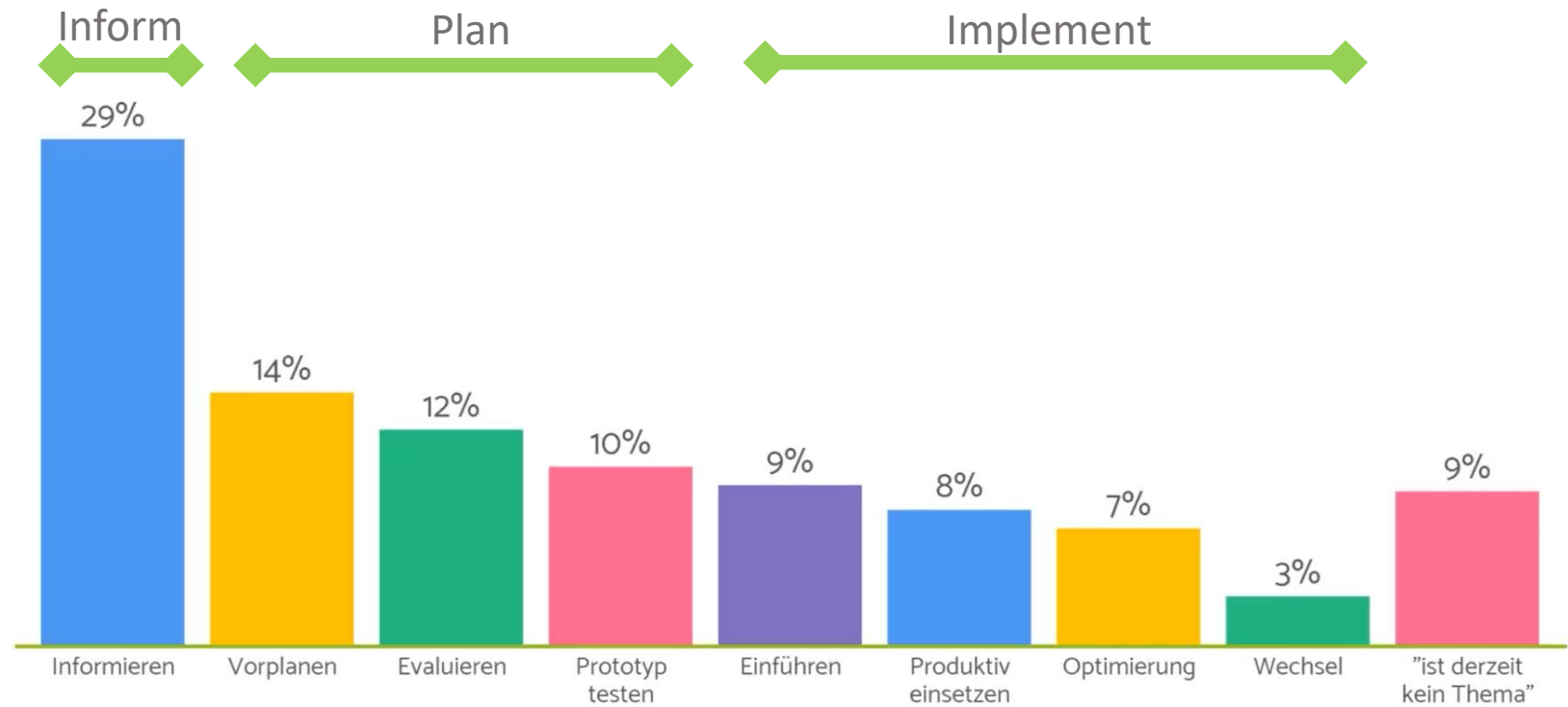


Variety of different metadata concepts
and system implementations



Introduction

Content Delivery: System Introduction Phases



Introduction

Metadata are used for

- search facets for retrieval
- object identification
- API parameter call & deep linking

Content Delivery

Component

Hydraulic system

Oil Pump

Information

Procedure

Testing

Machine

Z-006

Configuration

$a_1 | b_3 | \dots | x_5 | y_1 | z_5$

Hydraulic system

The hydraulic oil sample is taken via a test connection on the variable displacement pump.



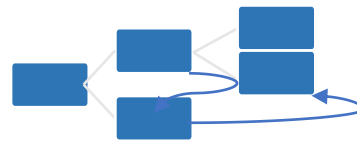
Fig. 250: Sampling point for hydraulic oil

- ▶ Start the engine and wait 3 minutes.
 - ▷ The hydraulic oil is circulated.
- ▶ Engage the parking brake and secure the machine against rolling away.
- ▶ Connect the test line to the test connection G.
- ▶ 0.2 l Drain the hydraulic oil into the receptacle.
- ▶ Fill the sample container.
- ▶ Remove the test line and seal the test connection.

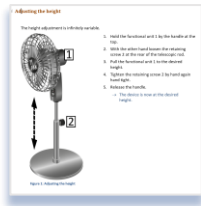
Retrieved Objects in CDP

Single topic

microDocs



Document
(complete topic assembly)



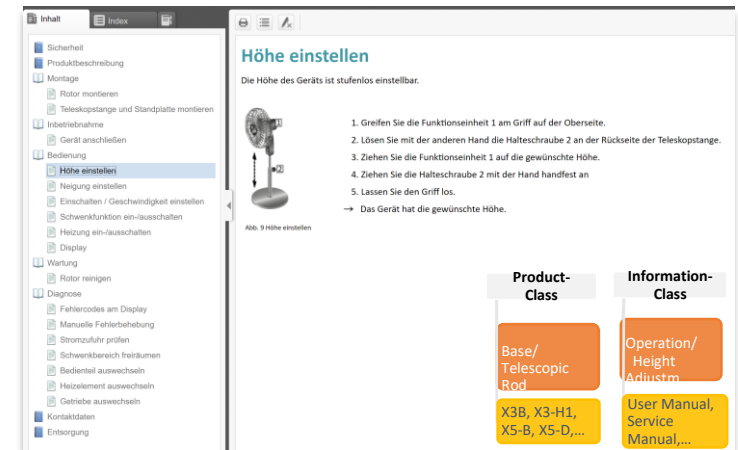
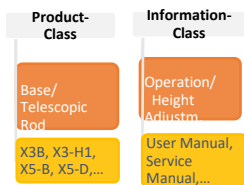
Lack of context

What is needed?

Abundance of content

A structured set of topics
with relevant context
and sufficient content

Relevance and sufficiency
ist defined by use cases!



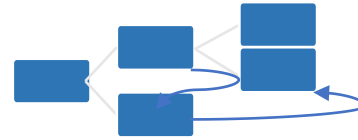
X3B

User Manual,

Future Content Access

microDocs (2019)

microDocs



Definition

***A microDoc is a (sub-)set of topics
required by predefined use cases
and **connected by a logical concept**
as a dynamic publication in search media***

The logical concept, the relevant context and the amount of required content can be derived at different levels from rules and semantic models.

How to implement microDocs by Semantic Correlation Rules (SCR)

Defining microDocs through Correlation Rules

SCR aim to express explicitly the hidden experience of users and knowledge of encountered groups

Use Case Harvesting & Knowledge Sources

Use Cases are typically reported and described by

- Service-technicians
- Help-Desks
- Direct and indirect user feedback
- Training staff
- Developers, engineers (prospective)
- UX professionals, Web analytics experts
- Regulatories, standards & laws experts
- Admins (IT), Configurator
- ...
- Content architects and writers
(by exchanging knowledge with other groups)

Implementing microDocs

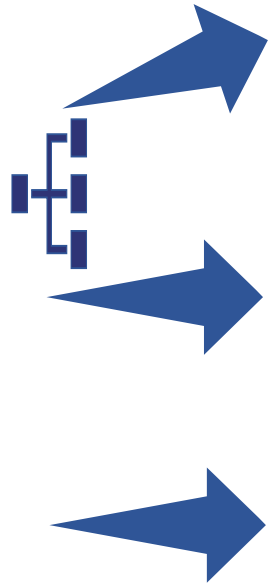
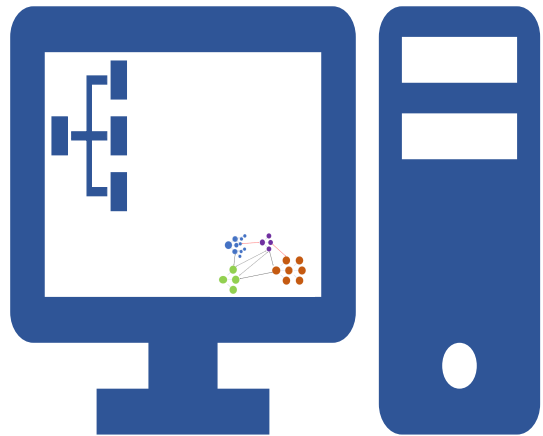
The principles of SCR
address the
„logical concept“ of mDocs
as sharable knowledge

Semantic Correlation Rules Requirements

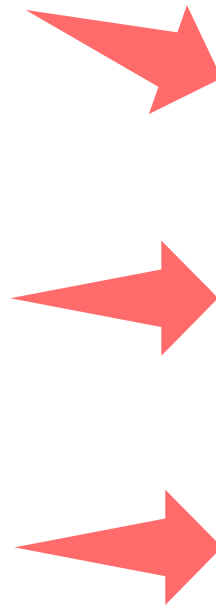
SCR should...

- ... describe correlations of (information) objects in a simple, but formalized and standardized way (→XML/RDFS/OWL) using existing object metadata
- ... be independent of specific content and explicit (CMS) linking processes
- ... be (able to be) modelled in different system environments
- ... be interpreted in search and delivery environments (e.g. as microDocs)

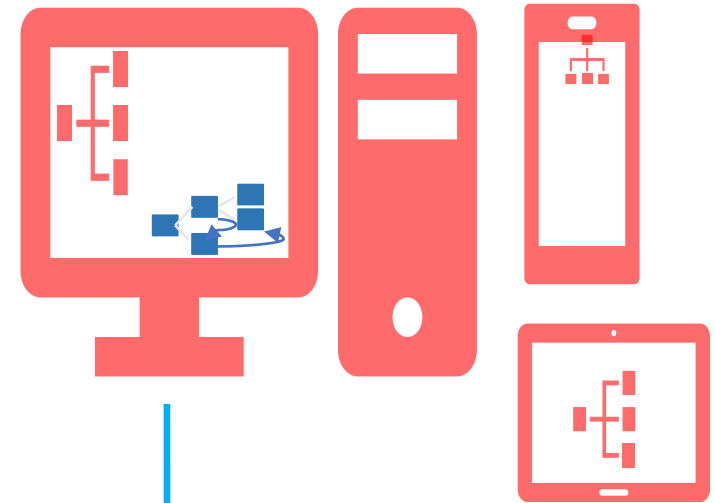
CMS



SMS



CDP



SCR

Correlation Rules
applied for demonstration
purposes to the
PI-Fan reference content
(www.pi-fan.de)
&
PI-Class + iiRDS Classification

Test and Demo Case

Primary Object

Getting started

The device is operated with a mains power voltage of 230V. Connect the device to the mains as described below.

Figure 1. Connection to the mains

1. Make sure that the plug (A) and the plug socket, which you wish to use to operate the device, are not damaged.
2. Connect the plug (A) to the socket (B).

The device is now ready to use.

Content Copyright (c) 2015, [EL-Eau-Polyst](#)
iiRDS Implementation Copyright (c) 2019, [iiRDS Consortium](#)

PI-Class:
P: Connection
I: Task/Getting started

iiRDS:
TopicType: Task
Lifecycle: PuttingToUse
Subject: **Functionality**
Component: Connection

Manual troubleshooting

Not all problems are electronically detected.
Some common problems are listed here with their possible causes and the actions to be taken.

Problem	Cause	Action
The device does not turn on.	- The power plug is not fully plugged into the socket outlet. - The extension plug socket is not turned on or is not plugged in to a wall socket. - The socket is defective	See Checking the power supply .
The rotor does not rotate even though the device is turned on.	The gearbox is damaged.	Have the gearbox replaced.

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iiRDS Implementation Copyright (c) 2019, [iiRDS Consortium](#)

PI-Class:
P: PI-Fan
I: Diagnostics/
ManualDiag

iiRDS:
TopicType: Reference
Lifecycle: Fault
Subject: [ManualCheck](#)
Component: PI-Fan

Secondary Objects

Correlated with

Error codes on display

Error codes are displayed on the screen if complications are detected electronically. Subsequently, these error codes are listed with possible causes and actions to be undertaken.

Error code	Cause	Action
1X111	Control defective	Replace the control unit.
2X222	Actuator locked	See Checking the power supply .
3X333	Defective heating element	Replace the rotor.
4X444	Gearbox damaged	Replace the gearbox.

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PI-Class:
P: PI-Fan
I: Diagnostics/
Errorcodes

iiRDS:
TopicType: Reference
Lifecycle: Fault
Subject: --
Component:
DisplayOperatingElement

Contact data

Our website:

www.pi-fan.de
www.pi-class.i4icm.de

Copyright:

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Contributors to the PI-Fan Project (1.0):
W. Ziegler
Contributors to the PI-Fan Project (1.1):
R. Gruenert, W. Ziegler

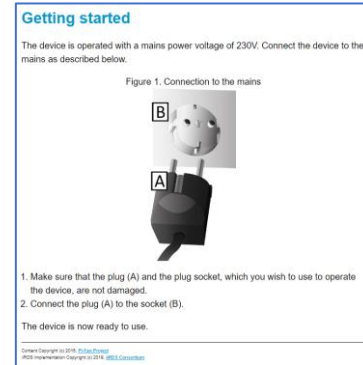
PI-Class:
P: PI-Fan
I: Descriptive/ContactData

iiRDS:
TopicType: Reference
Lifecycle: --
Subject: ContactInformation
Component: [PI-Fan](#)

Use Case

Demo Case

applied to the
PI-Fan reference content
&
PI-Class



Primary Object

Correlated with

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The rotor does not rotate even though the device is turned on.	The gearbox is damaged.	Have the gearbox replaced.

Content Copyright (c) 2015, [BL_Easy_Fan](#)
i4iCM Implementation Copyright (c) 2019, [i4iCM Consortium](#)

Secondary Objects

```
<NamedIndividual rdf:about="http://www.i4icm.de/PI-Fan/OutRule1">
  <rdf:type rdf:resource="http://www.i4icm.de/scr#OutRule"/>
  <scr:selects rdf:resource="http://www.i4icm.de/PI-Fan/ManualDiagnostics"/>
  <scr:selects rdf:resource="http://www.i4icm.de/PI-Fan/PI-Fan"/>
  <scr:Strength rdf:datatype="http://www.w3.org/2001/XMLSchema#integer">10
</NamedIndividual>
```

```
<NamedIndividual rdf:about="http://www.i4icm.de/PI-Fan/InRule1">
  <rdf:type rdf:resource="http://www.i4icm.de/scr#InRule"/>
  <scr:hasCorrelation rdf:resource="http://www.i4icm.de/PI-Fan/OutRule1"/>
  <scr:hasCorrelation rdf:resource="http://www.i4icm.de/PI-Fan/OutRule2"/>
  <scr:hasCorrelation rdf:resource="http://www.i4icm.de/PI-Fan/OutRule3"/>
  <scr:selects rdf:resource="http://www.i4icm.de/PI-Fan/Connection"/>
  <scr:selects rdf:resource="http://www.i4icm.de/PI-Fan/GettingStarted"/>
</NamedIndividual>
```

Secondary Objects

Manual troubleshooting

Not all problems are electronically detected.

Some common problems are listed here with their possible causes.

Problem	
The device does not turn on.	• The power plug is not • The extension cord is not plugged in to the socket • The socket is not working
The rotor does not rotate even though the device is turned on.	The gearbox is damaged.

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iRDS Implementation Copyright (c) 2019, iRDS Consortium

```
<!-- http://www.i4icm.de/scr/scr#OutRule1 -->
```

```
<NamedIndividual rdf:about="http://www.i4icm.de/scr/scr#OutRule1">  
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  <scr:selects rdf:resource="http://iirds.tekom.de/iirds#GenericReference"/>  
  <scr:selects rdf:resource="https://www.i4icm.de/pifan#ManualCheck"/>  
  <scr:selects rdf:resource="https://www.i4icm.de/pifan#PIFan"/>
```

```
<scr:Strength rdf:datatype="http://www.w3.org/2001/XMLSchema#integer">10</scr:Strength>  
</NamedIndividual>
```

Correlated with

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Contact data

Our website:

www.pi-fan.de

www.pi-class.i4icm.de

Copyright:

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W. Ziegler

Contributors to the PI-Fan Project (1.1):

R. Gruenert, W. Ziegler

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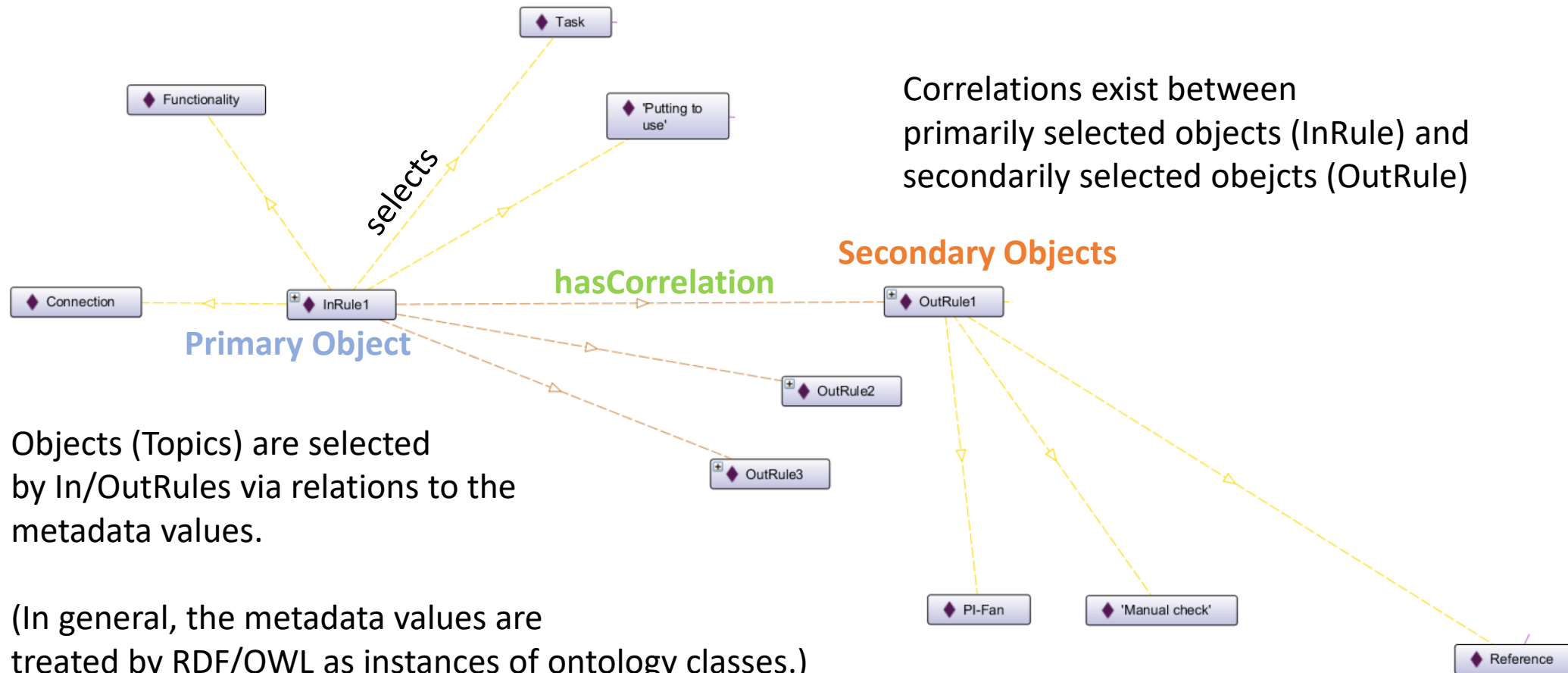
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iRDS Implementation Copyright (c) 2019, iRDS Consortium

```
<!-- http://www.i4icm.de/scr/scr#InRule1 -->
```

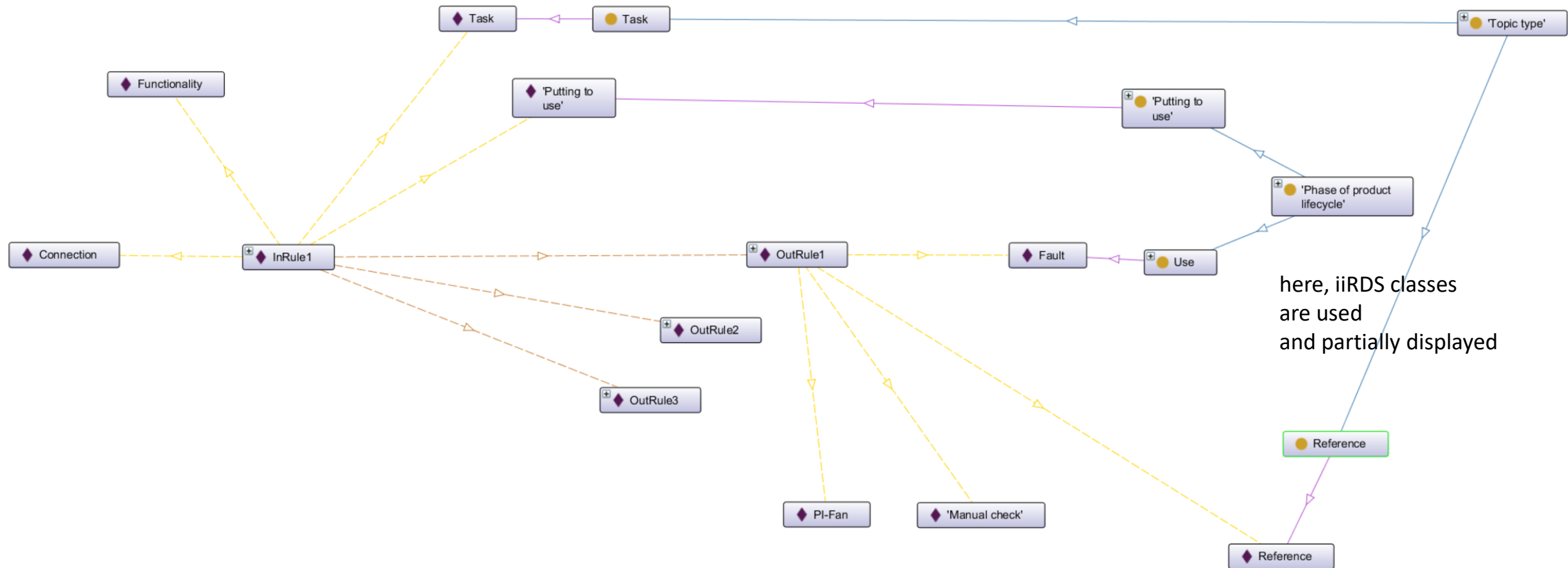
```
<NamedIndividual rdf:about="http://www.i4icm.de/scr/scr#InRule1">  
  <rdf:type rdf:resource="http://www.i4icm.de/scr/scr#InRule"/>  
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  <scr:hasCorrelation rdf:resource="http://www.i4icm.de/scr/scr#OutRule2"/>  
  <scr:hasCorrelation rdf:resource="http://www.i4icm.de/scr/scr#OutRule3"/>  
  <scr:selects rdf:resource="http://iirds.tekom.de/iirds#Functionality"/>  
  <scr:selects rdf:resource="http://iirds.tekom.de/iirds#GenericPuttingToUse"/>  
  <scr:selects rdf:resource="http://iirds.tekom.de/iirds#GenericTask"/>  
  <scr:selects rdf:resource="https://www.i4icm.de/pifan#Connection"/>  
</NamedIndividual>
```

Correlations: generalized, untyped relations

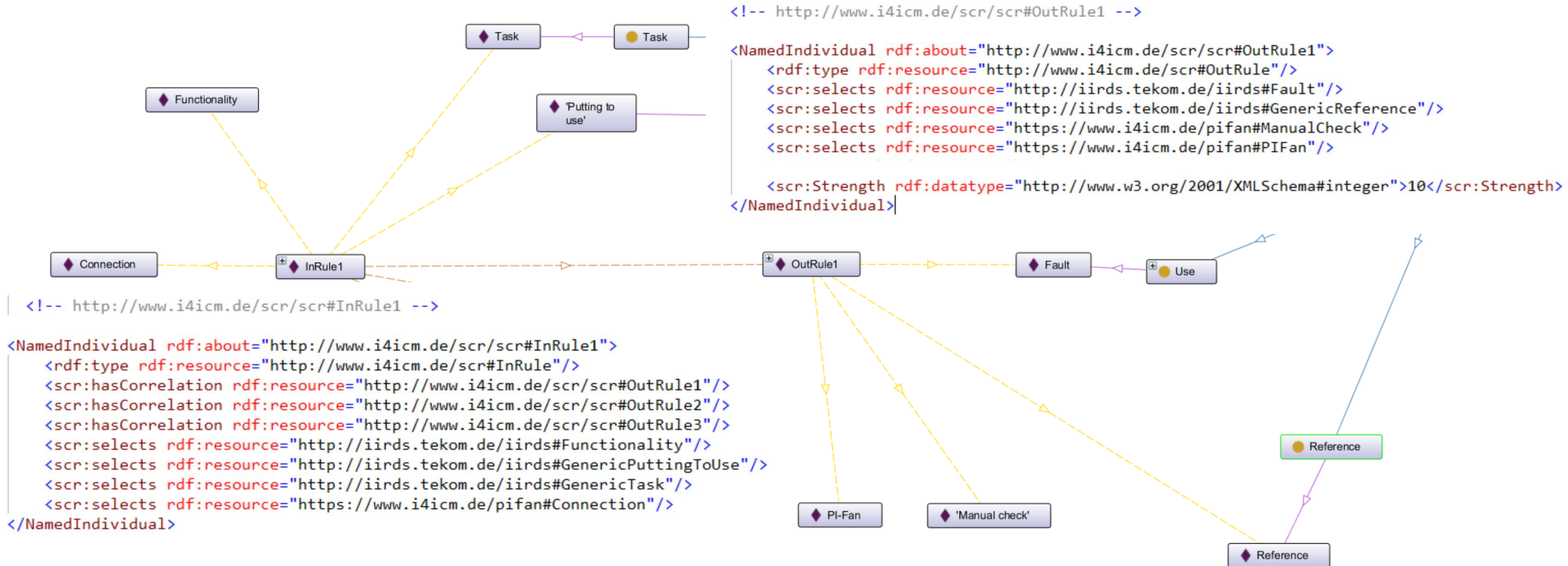
RDF/Ontology Visualization in Protégé



Metadata as instances of metadata classes given by custom/standardized (CCMS) ontologies



Implementation of SCR as RDF/OWL-rules (using iiRDS classes)



Documentation

In-code documentation (see scr.owl file)

RDF explanations on usage of classes, relations, instances and data properties

- Classes
 - scr
 - InRule
 - OutRule
- Relations
 - hasCorrelation
 - selects
 - equals
- Instances
 - (scr.root)
- Properties
 - ID
 - ReleaseDate
 - Role
 - Scope
 - Strength
 - Title
 - Version

Documentation

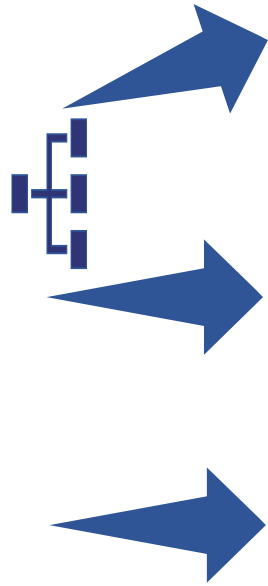
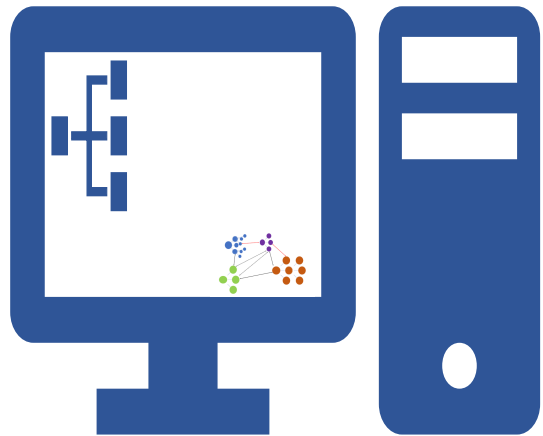
hasCorrelation

- Untyped correlation pointing from InRules to OutRules.
- The correlation describes the binding of secondary objects (information deliverables; often topics) to primary objects within a delivery scenario.
- In general, there are 1:N correlations as relations from InRules to OutRules, so that a certain number of information deliverables are displayed as microDocs. MicroDocs are therefore bound to the primarily requested object.
- Subtypes of the relation might be typed in further scr versions.

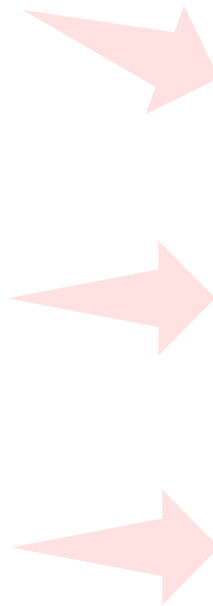
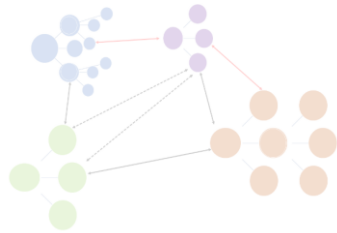
How (and where)
Semantic Correlation Rules
have been implemented

(2020)

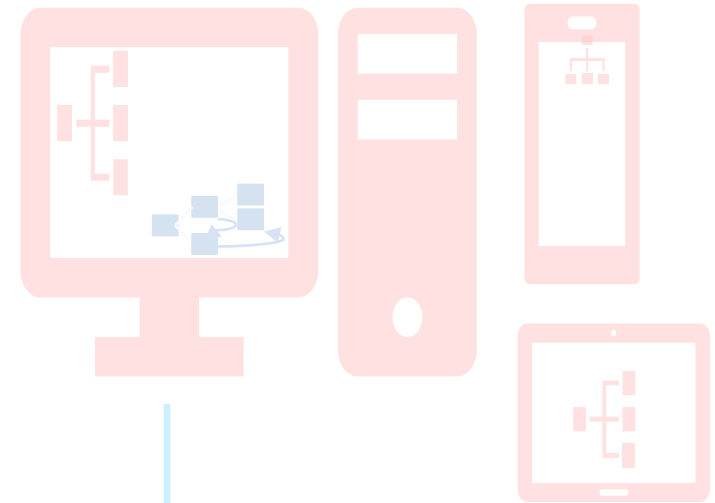
CMS



SMS



CDP



microDocs

CCMS

Smart Media Creator (Expert Communication Systems)

System implementation & visualization

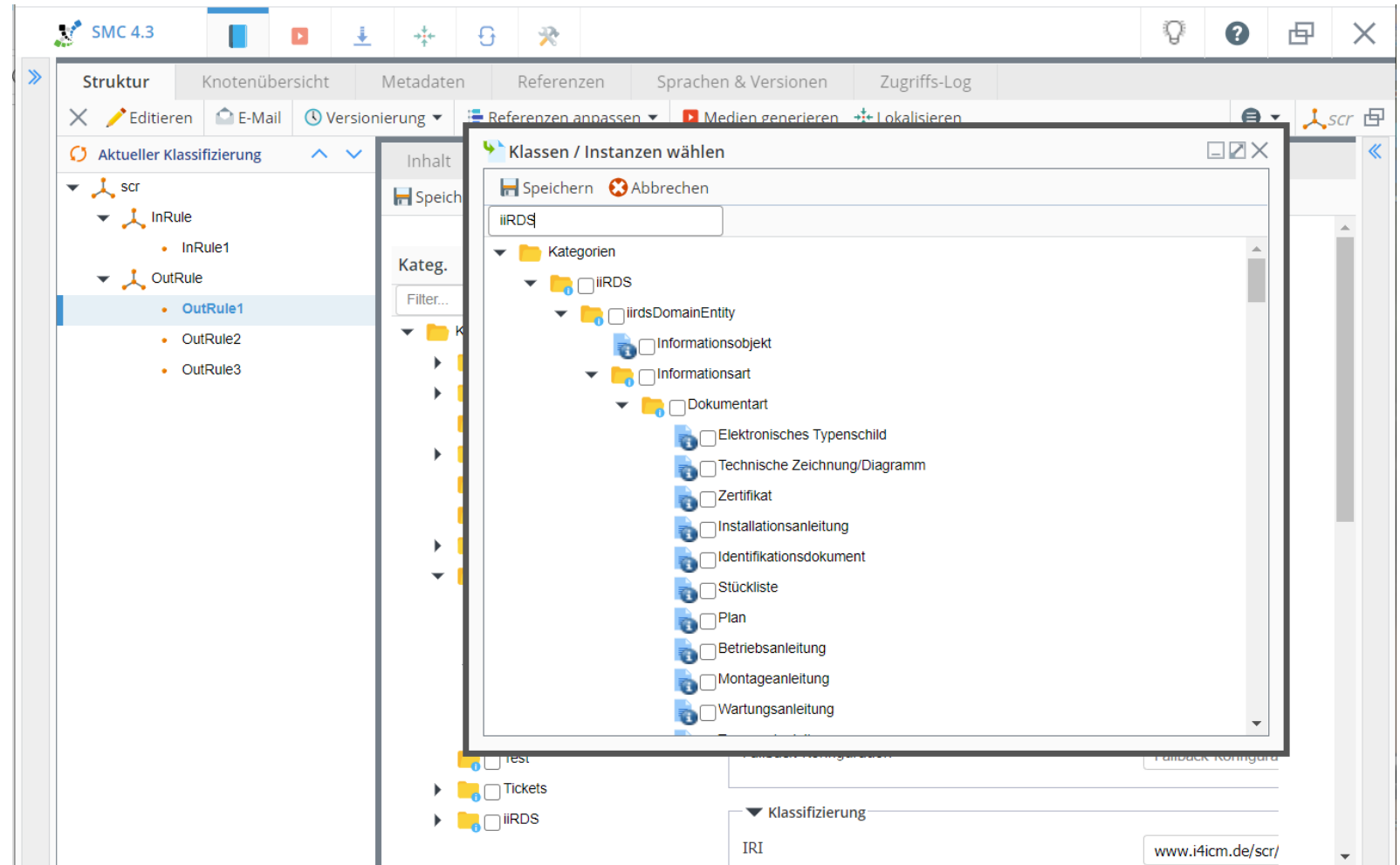
The screenshot displays the Smart Media Creator (SCM) 4.3 web interface. The browser address bar shows the URL: `127.0.0.1:8080/4.3.2a/#id=1596612291202&uri=/System/Charakterisierung/SCR/scr.theme&...`. The interface includes a top navigation bar with tabs for 'Struktur', 'Knotenübersicht', 'Metadaten', 'Referenzen', 'Sprachen & Versionen', and 'Zugriffs-Log'. Below this, there are action buttons: 'Editieren', 'E-Mail', 'Versionierung', 'Referenzen anpassen', 'Medien generieren', and 'Lokalisieren'. The left sidebar shows a tree structure under 'Aktueller Klassifizierung' with nodes for 'scr', 'InRule', 'OutRule', and 'OutRule1' (selected). The main content area is divided into two panes. The left pane shows 'Objekt-Metadaten' with fields: ID (1596612292309), Pfad (/Content/Tickets/SCR/OutRule1.theme), Erstellt von (mr / 2020-08-05 10:48:07), Zuletzt geändert von (mr / 2020-08-13 16:45:44), Typ (Instanz), and Standardsprache (German). The right pane shows 'Klassifizierung' with fields: IRI (www.i4icm.de/scr/scr#OutRule1), equals (http://iirds.tekom.de/iirds#ProductVariant), Strength (10), and selects (www.i4icm.de/pifan#PIFan, www.i4icm.de/pifan#ManualCheck, http://iirds.tekom.de/iirds#GenericReference, http://iirds.tekom.de/iirds#I). Below these fields is a tree structure for 'Charakterisierung' with nodes for 'Kategorien', 'SCR', 'scr', and 'OutRule' (checked).

microDocs

CCMS

Smart Media Creator
(Expert Communication
Systems)

System implementation & visualization



microDocs

CCMS

Klar: Suite (Klarso)

System implementation & visualization

TermStudio v3.6.63

File Mode Widgets Extras Help

Concepts

Product classes: Product classes | Produktkomponenten

Name	Type	
11 Base	Product classes	foundByT
9 Base plate	Product classes	foundByT
21 Blade	Product classes	foundByT
20 Blade mount	Product classes	foundByT
7 Ceiling mount	Product classes	foundByT
6 Ceiling mounting plate	Product classes	foundByT
32 Complete device	Product classes	foundByT
29 Connection	Product classes	foundByT
26 Cover	Product classes	foundByT
28 Display	Product classes	foundByT
16 Display_operating element	Product classes	foundByT
34 Drive	Product classes	foundByT
30 Electric motor	Product classes	foundByT
31 Gear box	Product classes	foundByT
27 Heating	Product classes	foundByT
23 Heating element	Product classes	foundByT
19 Impeller	Product classes	foundByT
24 Light fitting	Product classes	foundByT

Contact data

Name	Type	Info
16 Function	Information class	foundByT
19 General safety	Information class	foundByT
10 Getting started	Information class	foundByT
26 Getting started (structure)	Information class	foundByT
46 Height adjustment	Information class	foundByT
38 Info extrins.	Information class	foundByT
37 Info intrins.	Information class	foundByT
6 Information class 1	Information class	foundByT
7 Information class 2	Information class	foundByT
8 Information class 3	Information class	foundByT
20 Intended use	Information class	foundByT
13 Layout	Information class	foundByT
14 Maintenance	Information class	foundByT
28 Maintenance (structure)	Information class	foundByT
42 Manual	Information class	foundByT
36 Manual diagnostic	Information class	foundByT
1 Operating manual	Information class	foundByT
9 Operation	Information class	foundByT
27 Operation (structure)	Information class	foundByT

Key

Key	
1 Scope	
2 strength	10

Terms: OutR:Manual di...

1 OutR:Manual diagno...

Hierarchical Search

PI-Fan documents

- PI fan
 - 1_1 Safety_Gen. safety
 - 2 DESCRP_Product description
 - 2_1 Safety_Intended use
 - 2_2 Safety_Forsee. misuse
 - 2_3 DESCRP_Technical data
 - 2_4 Technical data overview
 - 3 DESCRP_Assembly
 - 4 INSTR_Getting started
 - 5 DESCRP_Operation
 - 5_1 INSTR_Adjusting the height

Typology Typology

Inheritance Parent/Child Table Analysis

Associative SCR-Editor

tbody td img h2 i div b scr.root scr.inrule scr.outrule Attribut Benutzer Element Dokument html Paragraph p Text Konzept Information class Product information Model range

IN-Object

1 Connection
2 Getting started

IN-Rules

1 InR:Connection,Getting started

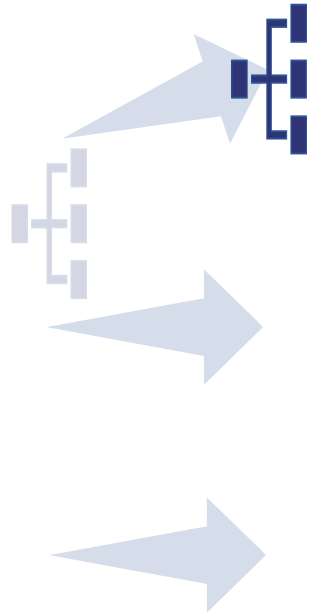
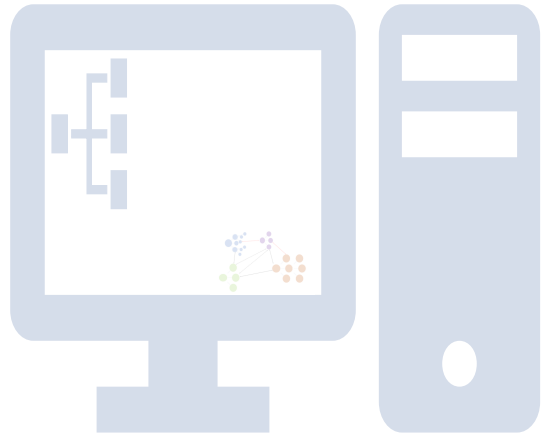
OUT-Rules

1 OutR:Manual diagnostic,PI fan ...
2 OutR:Error Code,PI fan (complete ...
3 OutR:Contact data,PI fan (complete...

OUT-Object

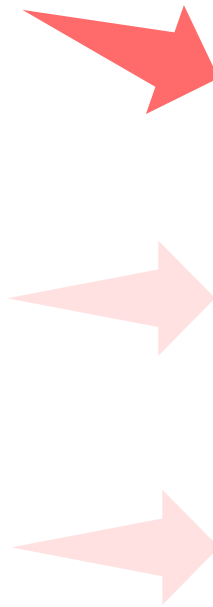
1 Manual diagnostic
2 PI fan (complete device)

CMS

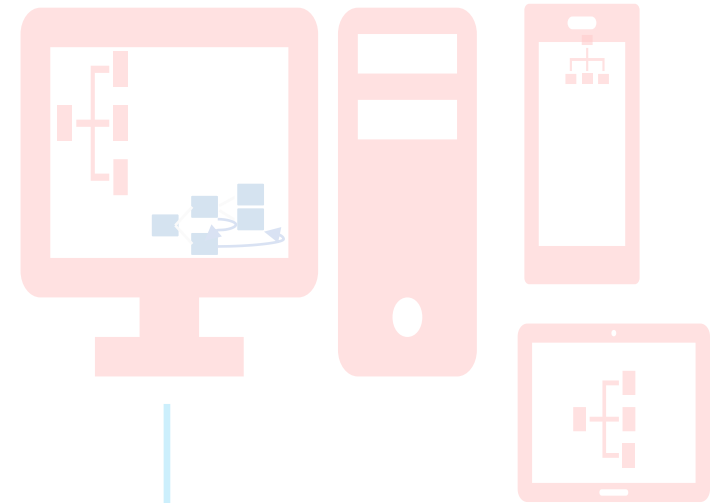


SMS

Semantic Modelling Systems



CDP



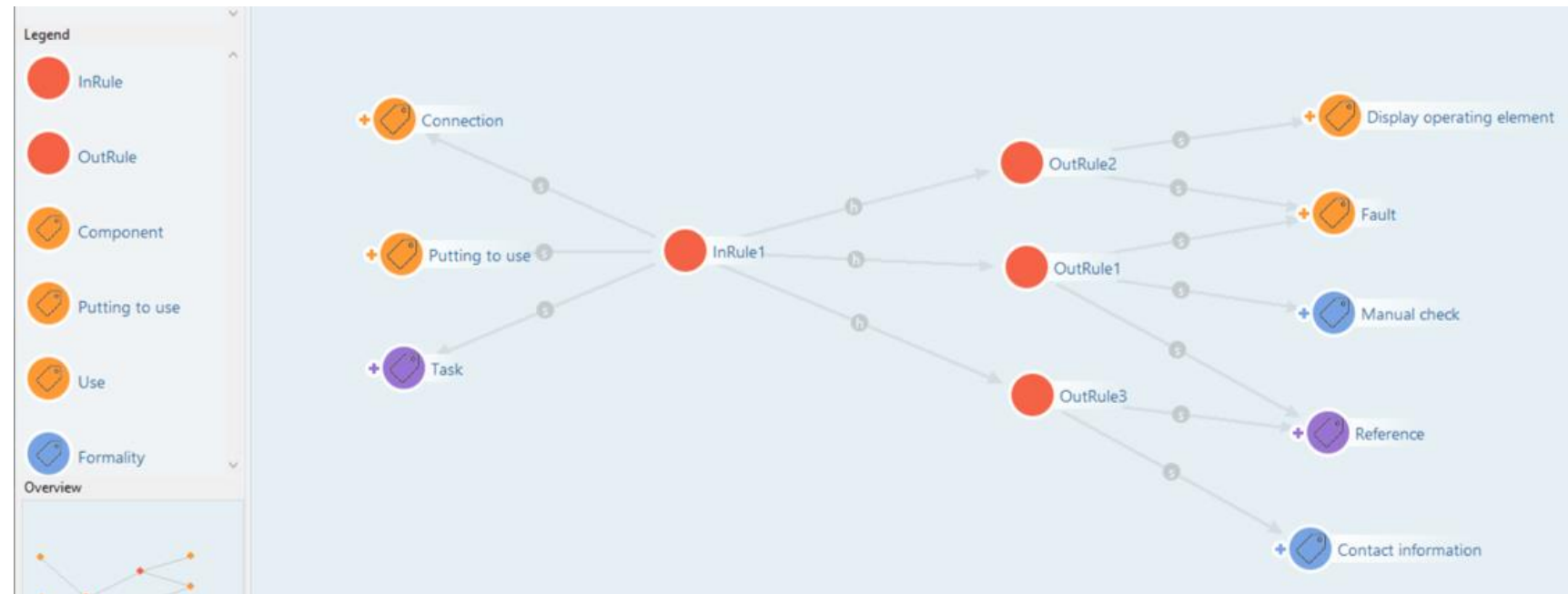
microDocs

SMS

I-Views/Empolis

iiRDS Modell + SCR

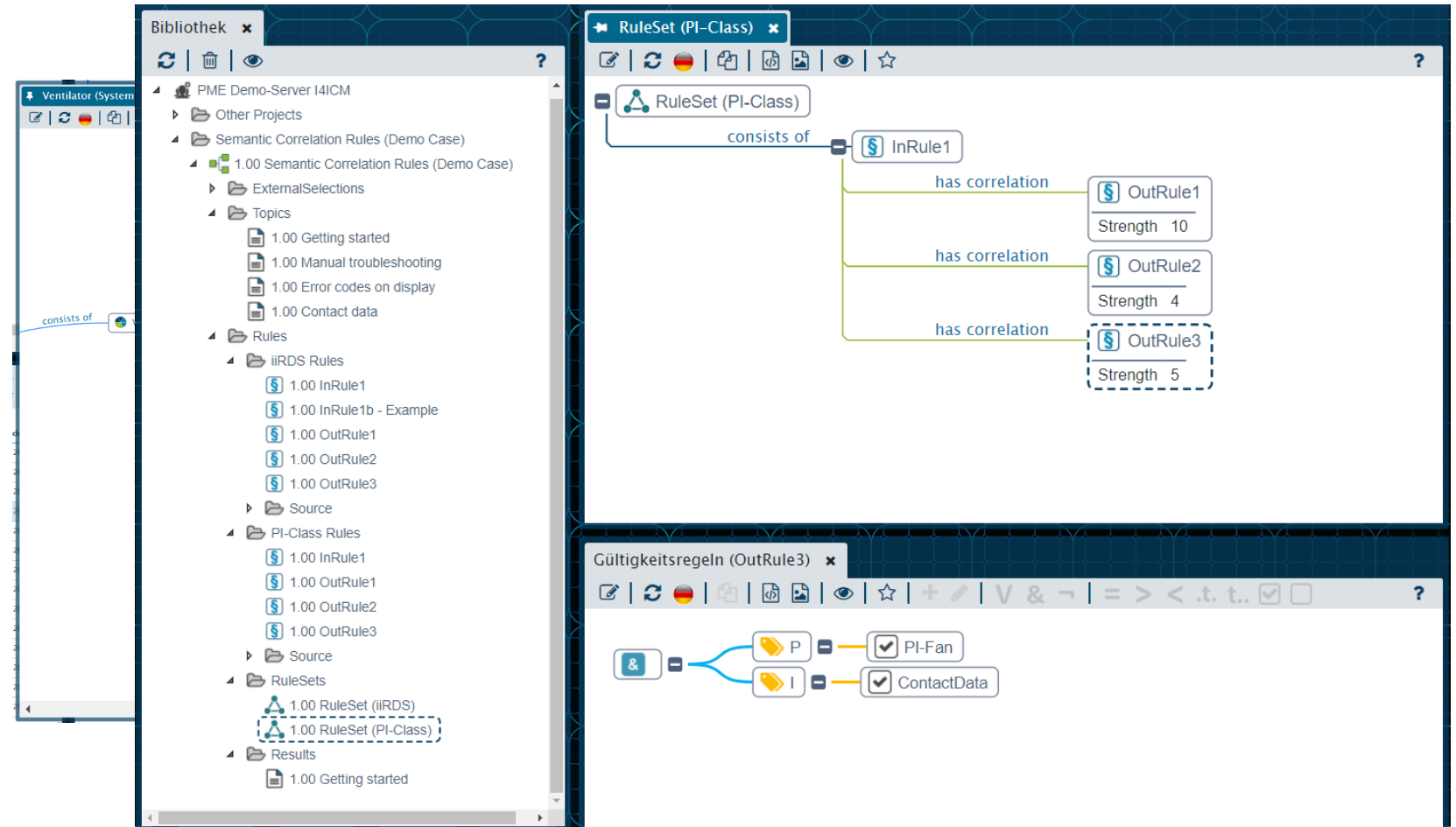
System implementation & visualization



microDocs

SMS: Ontolis

System implementation & visualization



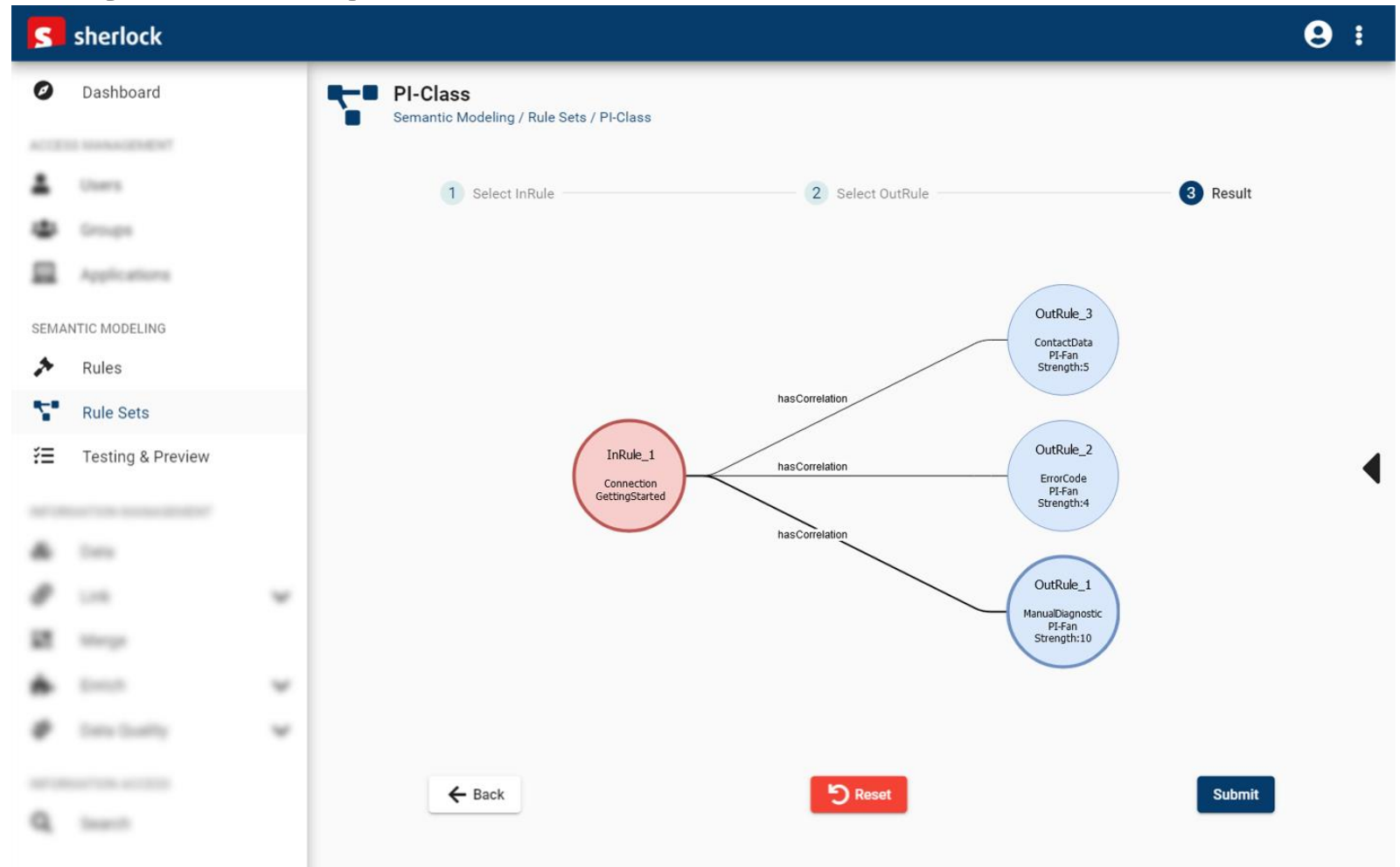
microDocs

SMS: Sherlock

Fischer Information

Technologies

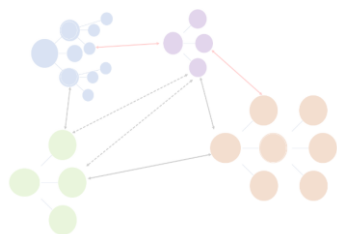
System implementation & visualization



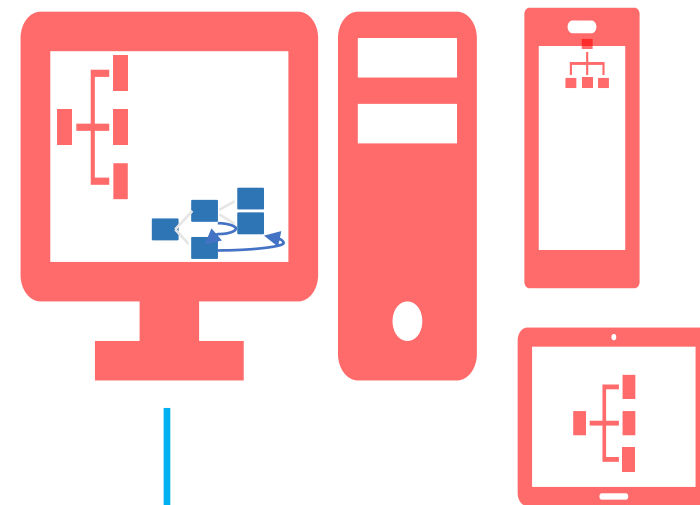
CMS



SMS



CDP



SCR processing

CDP

Sherlock (CDP-GUI)

Fischer Information

Technologies

System implementation & visualization

← Content Delivery

WAKO Press ZXUN 78 Inbetriebnahme Konfiguration

Informationen

WAKO Press ZXUN 78
Produkt

Inbetriebnahme Konfiguration
Abschnitt

100-AAE-CFK
Variante

Einstellelemente 0.37 ... 3 kW
Inhalt

Inhalt

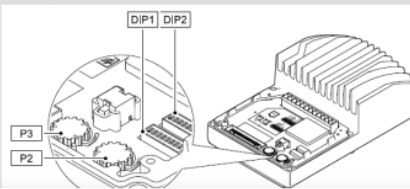
WAKO Press ZXUN 78 Variante 100-AAE-CFK
DIP-Schalter-/ Potibelegung 1

Einstellelemente 0.37 ... 3 kW

Auf der Innenseite der Drive Unit finden Sie die Einstellelemente. Vorgenommene Einstellungen durch DIP1, DIP2, P2, P3 und P1 müssen mit DIP1/1aktiviert werden. Die Einstellungen werden bei jedem Netzeinschalten erneutübernommen.

← 6.2.1. DIP-Schalter-/ Potibelegung 0

0.37 ... 3 kW



Verknüpfte Inhalte

Fehlerbehandlung

Technische Daten

Kontaktdaten

🏠

⬇️

🔗

⬇️

Powered by  sherlock

SCR processing

CDP: CDS

Expert Comm. Systems

System implementation & visualization

← 🔍

PI-fan

⋮

Table of Contents ^

📄 Allgemeine Sicherheits...

> 📄 Produktbeschreibung

> 📄 Montage

📄 Inbetriebnahme

> 📄 Bedienung

> 📄 Wartung

> 📄 Fehlerbehebung

📄 Entsorgung

Inbetriebnahme

Abbildung: Anschluss an das Stromnetz

Das Gerät wird mit einer Netzspannung von 230V Wechselstrom betrieben. Schließen Sie das Gerät wie im Folgenden beschrieben an das Stromnetz an.

1. Vergewissern Sie sich, dass am Netzstecker (A) und an der Steckdose, an welcher Sie das

⚙️ 🔗 ⚙️

Manuelle Fehlerbehebung ▾

Contact data ▾

Fehlercodes im Display ▾

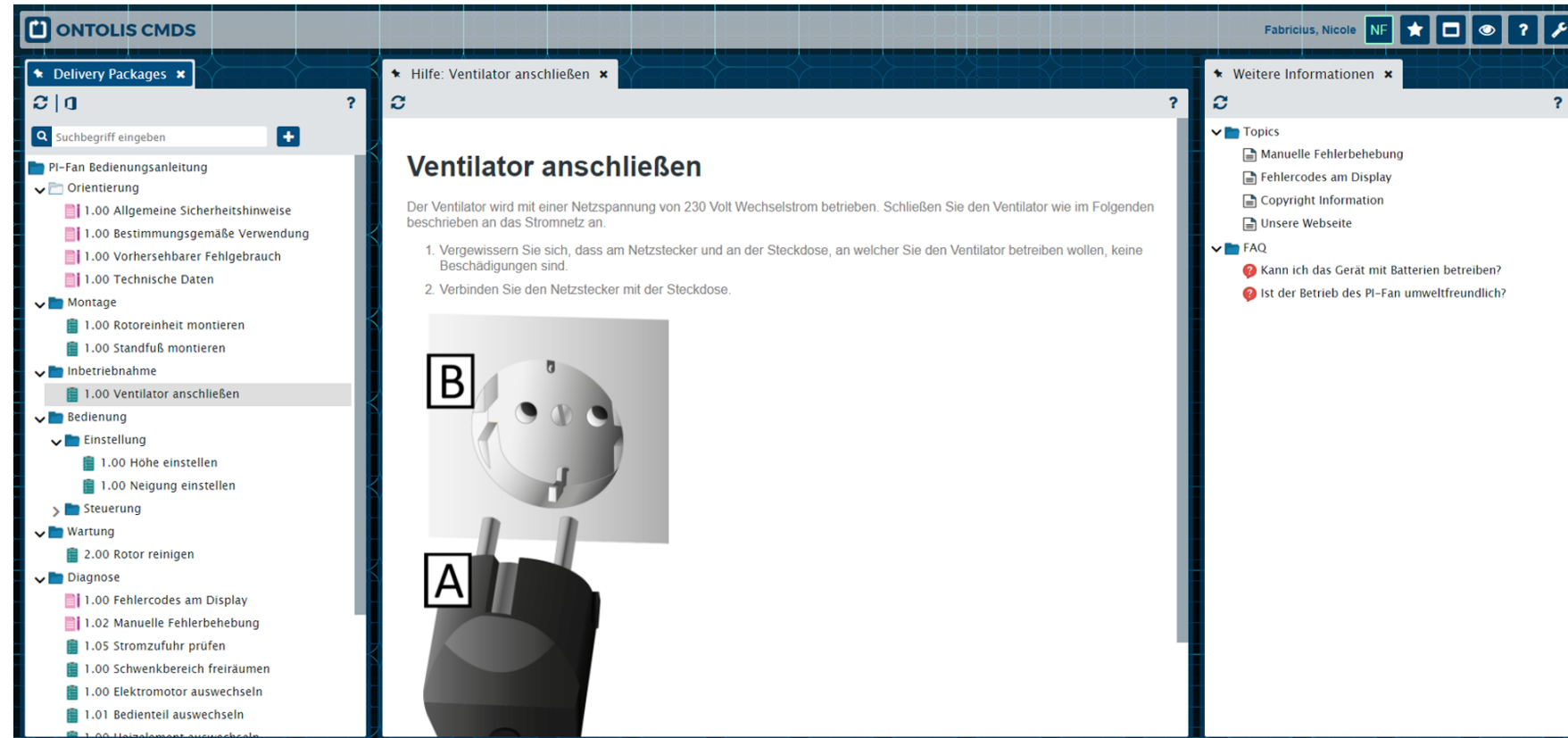
+

SCR processing

CDP:

CMDS (Ontolis)

System implementation & visualization



SCR processing

System implementation & visualization

CDP:

CMDs (Ontolis)

ONTOLIS CMDS

Fabricius, Nicole NF

Delivery Packages

Suchbegriff eingeben

PI-Fan Bedienungsanleitung

- Orientation
 - 1.00 Allgemeine Sicherheitshinweise
 - 1.00 Bestimmungsgemäße Verwendung
 - 1.00 Vorhersehbarer Fehlgebrauch
 - 1.00 Technische Daten
- Montage
 - 1.00 Rotoreinheit montieren
 - 1.00 Standfuß montieren
- Inbetriebnahme
 - 1.00 Ventilator anschließen
- Bedienung
 - Einstellung
 - 1.00 Höhe einstellen
 - 1.00 Neigung einstellen
 - Steuerung
- Wartung
 - 2.00 Rotor reinigen
- Diagnose
 - 1.00 Fehlercodes am Display
 - 1.02 Manuelle Fehlerbehebung
 - 1.05 Stromzufuhr prüfen
 - 1.00 Schwenkbereich freiräumen
 - 1.00 Elektromotor auswechseln
 - 1.01 Bedienteil auswechseln

InRule#1

V 1.05 – Hauptbranch – Arbeitsstand

has correlation

OutRule#1

Information Unit	Topic
Topic Type	Reference
Information Subject	ManualCheck
Component	PI Fan
Phase of product lifecycle	Fault
Strength	10

has correlation

OutRule#2

Information Unit	Topic
Topic Type	Reference
Component	Display
Phase of product lifecycle	Fault
Strength	4

has correlation

OutRule#3

Information Unit	Topic
Topic Type	Reference
Information Subject	ContactInformation
Component	PI Fan
Strength	6

has correlation

OutRule#4

Information Unit	Topic
Information Unit	FAQ
Component	PI Fan
Equals	PhaseOfProductLifecycle
Strength	6

Secondary Objects

V 1.00 – Hauptbranch – Arbeitsstand

Manuelle Fehlerbehebung

Topic Type	Reference
Information Subject	ManualCheck
Component	PI Fan
Phase of product lifecycle	Fault

Fehlercodes am Display

Topic Type	Reference
Component	Display
Phase of product lifecycle	Fault

Copyright Information

Topic Type	Reference
Information Subject	ContactInformation
Component	PI Fan

Unsere Webseite

Topic Type	Reference
Information Subject	ContactInformation
Component	PI Fan

Kann ich das Gerät mit Batterien betreiben?

Information Subject	Technical data
Component	PI Fan

SCR processing

CDP: I-Views Content

Basis: iiRDS + SCR

System implementation & visualization



key-user
(5)
(2)

Net-Navigator

Info

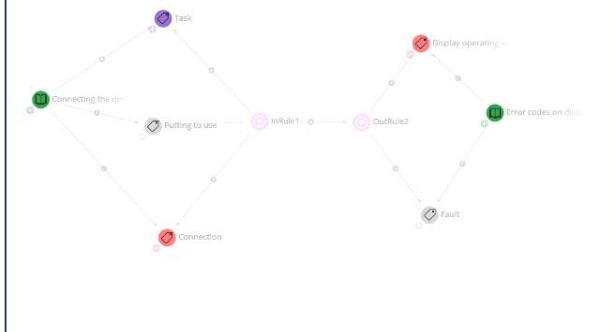
Kind

Comp

When

Who

SCR



EN

Connecting the device

The device is operated with a mains power voltage of 230V. Connect the device to the mains as described below.



1. Make sure that the plug (A) and the plug socket, which you wish to use to operate the device, are not damaged.
2. Connect the plug (A) to the socket (B).

- The device is now ready to use.

Figure 1: Connection to the mains

Documents

Correlated Topics

Copyright information

Error codes on display

Manual troubleshoot...

Our website

Product Variant

X5-DH1

Component

SCR processing

C-REX.net IDS API

Basis: iIRDS + SCR

SCR API (Content Service / headless CMS/CDP)

scr InRules

GET /scr/v1/InRules

GET /scr/v1/InRules/{id}

scr OutRules

GET /scr/v1/OutRules

GET /scr/v1/OutRules/{id}

GET /scr/v1/OutRules/{id}/rules

scr InRules

GET /scr/v1/InRules

Parameters

Cancel

Name Description

subject
string
(query)
urn:uuid:bf190d6b-d396-49f7-a32e-0dd7d07c3bf

Execute

Clear

Responses

Request URL

http://localhost:49327/scr/v1/InRules?
subject=urn%3Auuid%3Abf190d6b-d396-49f7-a32e-0dd7d07c3bf

Querying scr:InRules correlated to Information Unit

- subject – ID of certain iIRDS information Unit
- Result is JSON, with meta information of scr:InRule

```
{
  "items": [
    {
      "hasCorrelation": [
        { "id": "http://www.i4icm.de/scr/scr#OutRule1" },
        { "id": "http://www.i4icm.de/scr/scr#OutRule2" },
        { "id": "http://www.i4icm.de/scr/scr#OutRule3" }
      ],
      "selects": [
        { "id": "http://iirds.tekom.de/iirds#GenericFunctionality" },
        { "id": "http://iirds.tekom.de/iirds#GenericPuttingToUse" },
        { "id": "http://iirds.tekom.de/iirds#GenericTask" },
        { "id": "https://www.i4icm.de/pifan#Connection" }
      ],
      "titles": [
        { "language": "de", "value": "Dynamische Beziehungen (SCR)" }
      ],
      "id": "http://www.i4icm.de/scr/scr#InRulePiFan"
    }
  ]
}
```

SCR processing

CDP/DCS

Digital Content Service

C-REX.net IDS

Practice Innovation

The screenshot displays the 'PI-Fan' web application interface. On the left is a dark blue sidebar with icons for navigation: a menu icon, a magnifying glass, a pair of glasses, a document with a checkmark, a list icon, a star, and a circular arrow. The main content area has a dark blue header with the title 'PI-Fan' and a copyright notice '© 2020 c-rex.net GmbH' with an infinity symbol icon. Below the header is a search bar with the text 'Alle' and a dropdown arrow. A list of navigation items follows: 'Safety', 'Assembly', 'Getting started' (highlighted in orange), 'Product description', 'Maintenance', 'Operation', 'Troubleshooting', 'Contact data', and 'Disposal'. On the right side of the main area, there are two icons: a star and a printer. Below these is a section titled 'Getting started' which contains a dropdown menu 'Dynamische Beziehungen (SCR)' with sub-items: 'Troubleshooting', 'Fehlercodes', and 'Kontakt Informationen'. Below this menu is a large heading 'Getting started' followed by a paragraph: 'The device is operated with a mains power voltage of 230V. Connect the device to the mains as described below.' and a caption 'Figure 1. Connection to the mains'. At the bottom right, there is a small image showing a terminal block with a wire connected, labeled with 'R'.

PI-Fan

© 2020 c-rex.net GmbH

Alle

- › Safety
- › Assembly
- Getting started
- › Product description
- › Maintenance
- › Operation
- › Troubleshooting
- Contact data
- Disposal

Getting started

▼ Dynamische Beziehungen (SCR)

- › Troubleshooting
- › Fehlercodes
- › Kontakt Informationen

Getting started

The device is operated with a mains power voltage of 230V. Connect the device to the mains as described below.

Figure 1. Connection to the mains

SCR

In Preparation

- ... more to come

TOPIC PILOT®

DE | admin ABMELDEN |

Suchen

Alle Inhalte

Inhalt

T3-B Ventilator „PI-Fan“

- Ergänzende Anweisungen
- Allgemeine Sicherheitshinweise
- + Produktbeschreibung
- Montage
 - Rotor montieren
- Inbetriebnahme
- + Bedienung
- + Wartung
- + Fehlerbehebung
- Kontaktdaten
- Entsorgung

Rotor montieren

Topic - Bevor Sie Ihr Gerät benutzen können, müssen Sie zunächst den Rotor montieren.
Hier erfahren Sie, wie Sie dies tun können.

14.05.2018

▼ Weiterführende Informationen

Andere Informationen rund um diese Komponente: ➤ T3-B – Basis, Rotor

Andere Komponenten mit dieser Informationsart: ➤ T3-B – Basis, Montage

Spezifische Sicherheitshinweise für diese Komponente ➤ T3-B – Basis, Rotor, Sicherheit

Allgemeine Sicherheitshinweise für diese Produktvariante: ➤ T3-B – Basis, Sicherheit

VORSICHT

Kleinkinder oder Haustiere können Kleinteile verschlucken

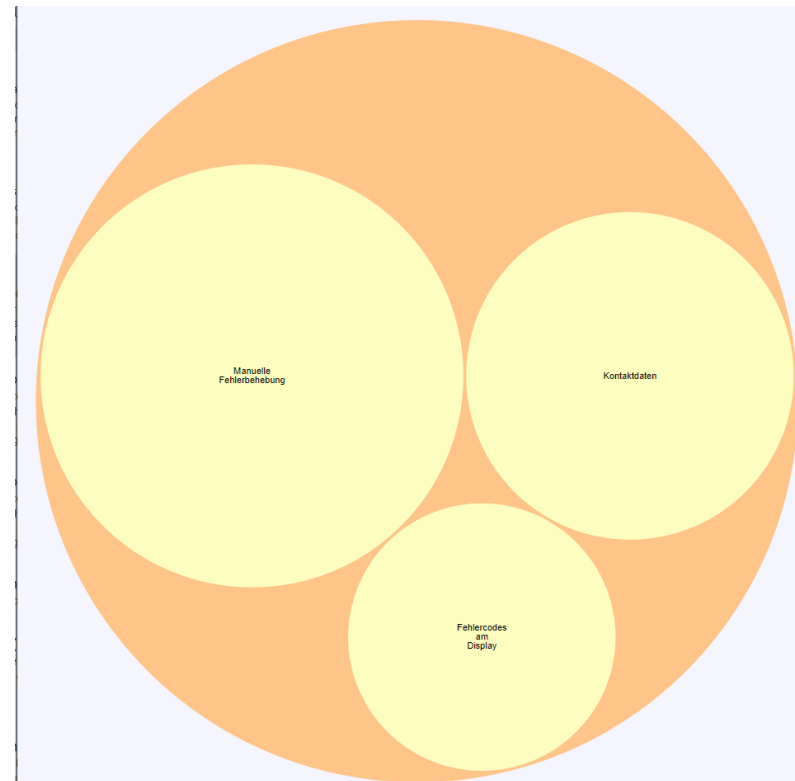
– Halten Sie Kleinkinder und Haustiere vom Ort der Montage des Geräts fern, um das Verschlucken von Kleinteilen wie Schrauben zu vermeiden!

Abb. 1: Schutzgitter-Rückseite montieren

1. ► Schieben Sie die Schutzgitter-Rückseite [1] auf den Antrieb [2], wie in Abb. 1 „Schutzgitter-Rückseite montieren“ zu sehen.

microDoc

Visualization



Installation

Getting started

The device is operated with a mains power voltage of 230V. Connect the device to the mains as described below.

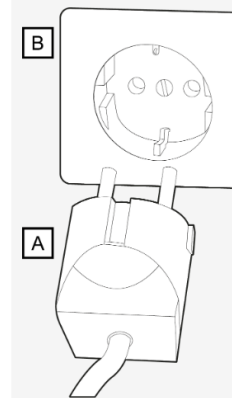


Abb. 1 : Connection to the mains

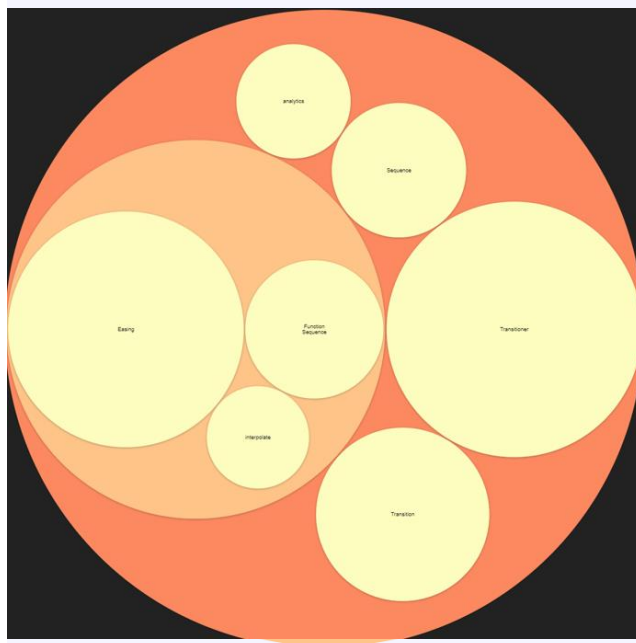
Make sure that the plug **A** and the plug socket, which you wish to use to operate the device, are not damaged.

Connect the plug **A** to the socket **B**.

The device is now ready to use.

microDoc

Visualization



Höhe einstellen

Die Höhe des Geräts ist stufenlos einstellbar.

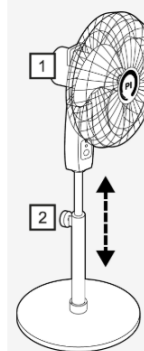


Abb. 1 : Höhe einstellen

Greifen Sie die Funktionseinheit **1** am Griff auf der Oberseite.

Lösen Sie mit der anderen Hand die Halteschraube **2** an der Rückseite der Teleskopstange.

Ziehen Sie die Funktionseinheit **1** auf die gewünschte Höhe.

Ziehen Sie die Halteschraube **2** mit der Hand wieder handfest an.

Lassen Sie den Griff los.

Das Gerät hat nun die gewünschte Höhe.

Summary

Summary

Semantic Correlation Rules

- are a technical and standardized implementation of microDocs
- store and apply knowledge from relevant use cases for information delivery (and other tasks...)
- describe class-to-class relations (e.g. links) between objects

Summary

SCR aspects and features

- Adaptable to user- and industry-relevant use cases of information requests and delivery events
- Compatible with widely adopted CMS technologies for semantic metadata (taxonomy, classifications, properties)
- Easy-to-use creation tools and interfaces; import/export mechanisms
- „(Ultra-)Light-weight ontology“:
Easy modelling without deep knowledge of semantic technologies
- First implementations in CDP;
import mechanisms and management by CDP;
Processing and integration depth depend strongly on CDP!
- Starting point of for more complex semantic modelling;
integration into semantic models and modelling tools
- Allows for systematic improvement of correlations and subsequently content, systems and products
- Allows for sharing and using knowledg of critical use cases

Ressources

Legal issues (free to use, but references are mandatory)

Version 1.0.0 of Semantic Correlation Rules (SCR)

Intent:

Provide a generic object correlation mechanism for implementing microDocs concepts in delivery scenarios.

Typically used in content delivery portals (CDP) or other kinds of search portals.

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Karlsruhe Univ. of Applied Sciences &

Institute for Information and Content Management (I4ICM)

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Ressources

<https://www.i4icm.de/>

→ Publikationen

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Literature & Downloads

- W. Ziegler, "Regelmäßig Verbindungen schaffen", technische kommunikation, Vol. 6, S. 18-25 (2020)
- W. Ziegler, Extending intelligent content delivery in technical communication by semantics: microdocuments and content services: Proceedings of the ETLTC 2020 conference. Aizuwakamatsu, Japan (2020)
<https://doi.org/10.1051/shsconf/20207703009>
- W. Ziegler, „Delivery zwischen Kontext und Content" technische kommunikation, Vol. 6, p. 58-61 (2019)
- SCR Downloads <https://www.i4icm.de/downloads/scr/1.1.0/> <https://www.i4icm.de/scr/>
 - SCR Definition in OWL/RDF notation (Base classes and relations): SCR.owl
 - Example of SCR-file for the PI-Fan using iiRDS: PI-Fan.iiRDS.scr.owl
 - Example of SCR-file for the PI-Fan using PI-Class: PI-Fan.PI-Class.scr.owl

The corresponding complete files including correlations and classes/instances are also included for information purposes
- PI-Downloads (<https://www.i4icm.de/downloads/>)
 - PI-Fan classes/instances (slightly modified for demonstration purposes) using the PI-Class classification schema
 - PI-Class core classes of the PI-Classification methodology
- iiRDS Downloads
 - PI-Fan Reference content using iiRDS
<https://iirds.org/material-downloads/sample-content/>
 - iiRDS Definition
<https://iirds.org/material-downloads/iirds-version-1-0-1/>

Feedback

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- Support was also provided by HSKA (research sabbatical)