

Building a KDSF 2.0 - Compliant CRIS Infrastructure: From a Lusatian Research Portal to a State-Wide CRIS for Brandenburg

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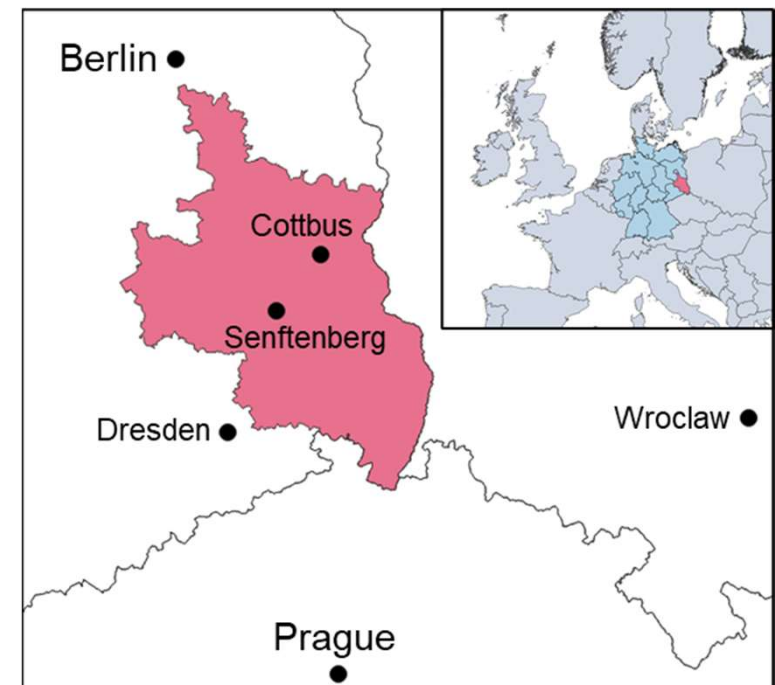
Cooperating Project Partner:

Medical University in Cottbus, Brandenburg, MUL-CT

THE GROWING RESEARCH LANDSCAPE IN LUSATIA

A MODEL REGION FOR TRANSFORMATION

- Lusatia is an emerging scientific region in North-East Germany
- Sustainable transformation following the coal phase-out
- Development of overarching research networks
 - Interdisciplinary cooperation between universities, research institutes, industry, and regional institutions
- Challenge: transparent and cross-institutional research information management
- Need for CRIS as strategic tools for communication, evaluation, transfer, and evidence-based policy-making



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<https://www.lausitz-science-network.de/>

PILOT INSTITUTIONS CONTRASTING CONDITIONS

PROJECT LEAD

**BTU COTTBUS – SENFTENBERG**
Brandenburg University of Technology
Cottbus – Senftenberg



	Established technical university
	Broad interdisciplinary academic profile
	Existing research and administrative structures
	Ongoing CRIS implementation
	Multiple faculties and established reporting processes



COOPERATING PROJECT PARTNER

Medizinische Universität
Lausitz – Carl Thiem



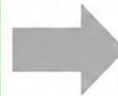
	Newly founded medical university
	Human medicine and health sciences focus
	Research information structures currently under development
	Initial CRIS implementation phase
	Opportunity to establish structures from the beginning

LIVING LAB APPROACH

Project vision:

Developing and evaluating a KDSF 2.0-based CRIS infrastructure for the Lusatia region.

- 1** **Contrasting** institutional starting points for CRIS implementation
- 2** **Implementing** KDSF 2.0-based CRIS infrastructures under different organisational conditions
- 3** **Systematic documentation** of experiences and challenges
- 4** **Development of transferable** implementation and governance guidelines to build scalable approaches for other research partners
- 5** **Integration of additional** regional research partners into the CRIS system
- 6** **Scientific accompanying research** for project evaluation



Properties of future CRIS



Comprehensiveness

All research information from the Lausatia in one place.



Interoperability

KDSF 2.0 based.
Connected.
Future-proof.



Reliability

High-quality data for transparency and trust.



For the Region

Strengthening research.
Shaping the future.

KDSF 2.0

RESEARCH INFORMATION MANAGEMENT IN GERMANY

- **KDSF 2.0:** Current German standard for structured research information management
 - Standardised management of research information and outputs
 - Improved interoperability and comparability between institutions
 - Supports reporting, evaluation, monitoring, and strategic decision-making
- **CERIF and KDSF 2.0:**
 - Conceptually based on CERIF, but adapted to the German research system and its specific reporting requirements
 - Focuses on a manageable core set of data elements
 - Technical data model vs. metadata schema

1. CORE DATA MODEL

Structured based on core data entities (such as persons, employments, doctoral procedures, projects, publications, etc.).



2. MODULES

The core data model is divided into modules, which clearly describe which core data entities, attributes and relationships are required to enable an information-providing organisation to report on specific topics.



3. KDSF REFERENCE QUERIES

Include proposals for queries based on the KDSF core data model.

Information regarding KDSF 2.0 taken from <https://doi.org/10.58010/kdsf:2.0:2025>

CRIS SOFTWARE UNIVERSIS PROPERTIES AND ADVANTAGES

- Flexible information platform UniversiS:
 - Modular system
 - Web browser-based Java application with extendable modules
 - Core functionalities: automatic data integration, workflow-based data validation, structured data preparation
 - KDSF 2.0 standard already implemented
- Existing software models can be used, combined and easily adapted or extended
- Specification is carried out using an Excel-based configuration file containing:
 - The complete data model, workflows and validations, roles and permissions, reports

Data model, Workflows and Validations, Roles and Permissions, Reports



Configuration file

entityKey	dataElementKey	dataElementType	dataElementValidation	LABEL de_DE
Projekt	gridDetailsAntrag	grid		Projektantrag
Projekt	Acronym	string	:length 16	Acronym des beantragten Projekts
Projekt	TitelDE	string	:length 256	Titel des beantragten Projekts in Deutsch
Projekt	TitelEN	string	:length 256	Titel des beantragten Projekts in Englisch
Projekt	Beschreibung	string	:length 512	Kurzbeschreibung der Projektidee (in Englisch oder Deutsch)
Projekt	AntragsArt	selectionlist	AntragsArt	Art des Antrags: abhängig vom Verfahren und Anlaufversuch
Projekt	Projekt:Hat-Ausschreibung	link	style:grid:direction:1-to-r	Projekt-Ausschreibung
Projekt	gridDetailsProjekt	grid		Projekt
Projekt	gridDetailsProjekt	string	:length 16	Förderkennzeichen
Projekt	gridDetailsBudget	grid		Budget
Projekt	gridDetailsBudget	number	:digits 8 fraction 2	Fördersumme (ohne Projektpauschale)

<https://universis.eu/>

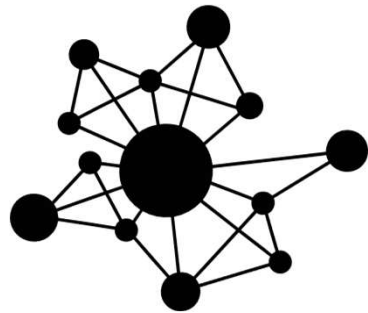
CRIS SOFTWARE UNIVERSIS

BREATHE LIFE INTO THE KDSF – BASED ON UNIVERSIS, THE INDIVIDUAL STANDARD SOLUTION

The standard data model

All KDSF

- Entities
- Links
- Selection lists
- ...

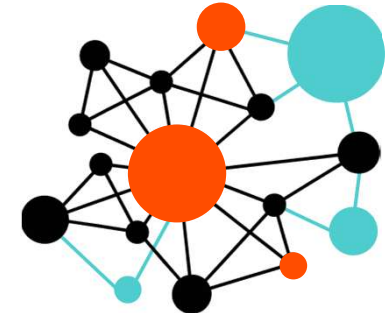


Start with the existing configuration file and have the KDSF system running within 5 minutes.

The individual solution

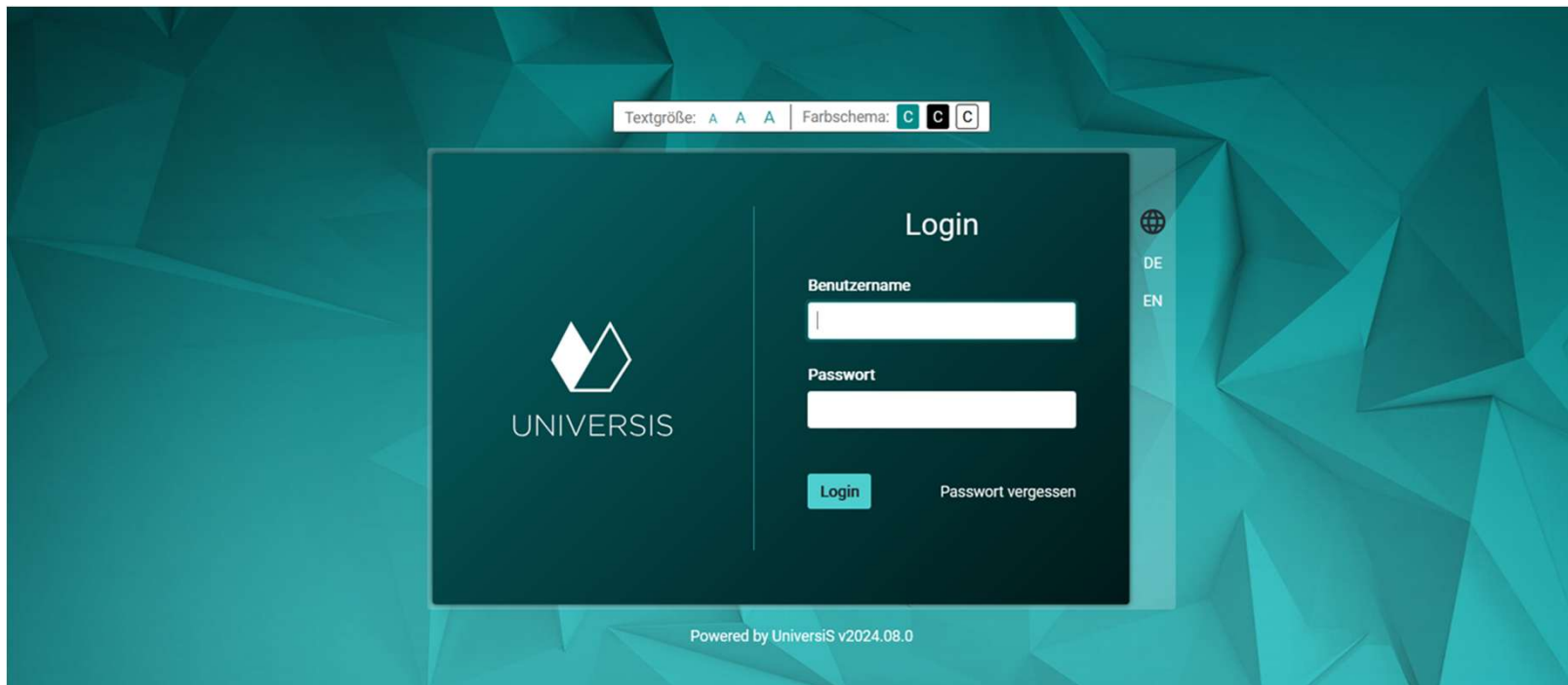
Add data fields

- Events
- Activities
- Financial data
- ...



Add a new data field with a single row in Excel within 2 minutes.

CRIS SOFTWARE UNIVERSIS BREATHE LIFE INTO THE KDSF – BASED ON UNIVERIS, THE INDIVIDUAL STANDARD SOLUTION



<https://system24.universis.eu/>

TOWARDS AN OPEN RESEARCH PORTAL FOR LUSATIA

**FiLa@FIP-BB**
Lusatia Research Portal

 Home

INSTITUTIONS

 BTU Cottbus-Senftenberg

 Medical University
Lausitz - Carl Thiem (MUL-CT)

 Institute Placeholder 1

 Institute Placeholder 2

 Institute Placeholder 3



For the Region.
For Research.
For the Future.

[Learn more about our mission →](#)

LUSATIA RESEARCH PORTAL

Your research. Our region. One portal.

The research information system (FIS) for Lusatia.
All research activities. One source of information.

[Explore current research activities >](#)



Lausitz

 Employees

 Qualification Procedures

 Doctoral Programs

 Projects

 Finances

 Publications

 Intellectual Property

 Start-ups

 Infrastructures

OUTLOOK

A STATE-WIDE CRIS FOR BRANDENBURG

- Development of a state wide CRIS nucleus
- Focus: Standardized research information for reporting and governance at federal state level
- No emphasis on public science communication, unlike regional portal
- Generation of KDSF-compliant reports and flexible analyses for Brandenburg's government
- Utilization of an automated data exchange from institutional CRIS systems
- Benefits:
 - Reduces administrative burden of recurring reporting
 - Enhances data consistency and transparency

CONCLUSIONS

- Regional pilot project for a KDSF-compliant CRIS infrastructure in Lusatia
- Support for research visibility, reporting, and strategic decision-making
- Joint development by BTU and MUL-CT within a living lab approach
- Development of guidelines enabling regional partners to join the CRIS
- Goal = interoperable, scalable research infrastructure, eventually to be extended into a future federal state-wide CRIS for Brandenburg



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