16 years of PHAIDRA at the University of Vienna – or: How research data management came to the library

Abstract: Since 2008, the PHAIDRA repository has given all members of the University of Vienna the opportunity to archive digital scholarly materials securely. Initially designed as a single repository with a long-term archiving function, over the years, PHAIDRA has evolved through close collaboration between the University Library and the Vienna University Computer Centre. Today, it has grown into a robust repository landscape, offering a comprehensive infrastructure for research data management that serves a diverse range of disciplines across the entire university.

This article outlines the key milestones in the development of PHAIDRA, tracing its journey from a simple repository to a multifaceted service integrated into national and international networks.

Keywords: Repository; PHAIDRA; University Library Vienna; Research Data Management

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1. The Beginning

In 2006, the rectorate at the University of Vienna asked the Library to evaluate options for the long-term preservation of the university's digital assets. A dedicated workgroup was formed to develop a digital repository and, the following year, this group evolved into the "Digital Asset Management System" project. Housed within the University Library, the group also included colleagues from the Vienna University Computer Center and various university institutes and departments. Collaborating together, they held extensive discussions to determine the repository's requirements.

When the team was unable to find a suitable, existing solution for a long-term archiving repository, they decided to adopt the open source software FEDORA, which could be customized to meet the University of Vienna's specific needs. The first version of PHAIDRA (Permanent Hosting Archiving and Indexing of Digital Resources and Assets)¹

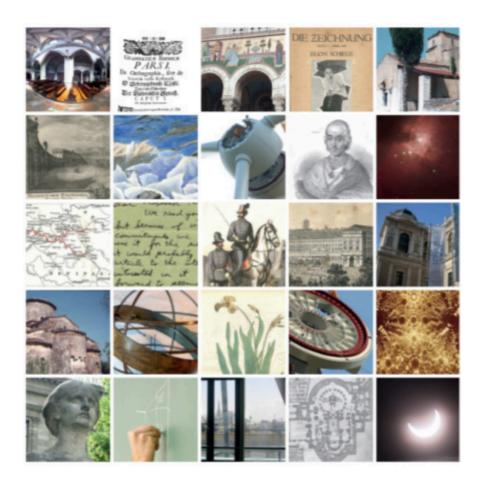
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¹ Access to PHAIDRA repository: https://phaidra.univie.ac.at

launched online as a repository on April 16, 2008.² Soon after, books, collection items, texts, data, and a variety of other materials began to be archived.









Permanent Hosting, Archiving and Indexing of Digital Resources and Assets

Img 1: PHAIDRA-Folder from 2013 (https://phaidra.univie.ac.at/o:292577)

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² Also see the first object in PHAIDRA: https://hdl.handle.net/11353/10.1

2. Networking and developments

2.1 The PHAIDRA network

In 2010, the team expanded the PHAIDRA network by establishing successful partnerships with the University of Padua and the University of Applied Arts in Vienna³. Currently, 25 institutions both domestically and internationally utilize the PHAIDRA system for long-term archiving. These institutions have the option of being hosted by the Vienna University Computer Center or running their own instance.⁴

2.2 Services for Different Target Groups

In 2012, the University of Vienna launched u:scholar, an institutional repository that is technically integrated with PHAIDRA.⁵ u:scholar uses a specialized metadata form designed to help authors handle self-archiving and published versions of their work, which are curated by library staff and archived in PHAIDRA for long-term preservation. This system simplifies compliance with open access requirements from research funders such as the Austrian Science Fund (FWF). Digital objects in u:scholar receive persistent web addresses and are discoverable through national and international indexing tools, such as library catalogs and search engines.⁶

PHAIDRA began participating in several EU projects, including Europeana Libraries, Tempus, and OpenAIRE, in 2011.⁷

Since 2015, the PHAIDRA team has increasingly focused on answering the growing need for research data management. It offers introductory training on data management plans at the University of Vienna and conducts seminars on professional data management. As a part of this, the team has presented extensively at national and international conferences and published material on research data management and long-term archiving.⁸

2015 also saw the start of a close collaboration with the Digital Library and Bibliography for Literature in Translation and Adaptation (DLBT)⁹ at the University Library of Vienna. This project provides researchers with a database and research infrastructure to support the analysis of translated literature and literary critiques across national literary

³ All PHAIDRA partners at a glance as of 2024: https://datamanagement.univie.ac.at/ueber-phaidra-services/das-phaidra-netzwerk/

⁴ https://phaidra.org

⁵ https://uscholar.univie.ac.at/

⁶ https://uscholar.univie.ac.at/info/policy

⁷ https://datamanagement.univie.ac.at/ueber-phaidra-services/anbindung-an-projekte/

⁸ https://datamanagement.univie.ac.at/ueber-phaidra-services/publikationen/

⁹ https://dlbt.univie.ac.at/

boundaries. Leveraging PHAIDRA for long-term archiving, DBLT ensures permanent access to these digitized materials and bibliographic records.

In subsequent years, additional archiving systems¹⁰ were established alongside the PHAIDRA repository, offering various storage options such as PHAIDRA-Local within the University of Vienna network, PHAIDRA-Depot for external users, and the PHAIDRA-Sandbox test instance.

RepManNet, the Austrian repository managers network, was established¹¹ in 2016, as a result of successful national projects like e-infrastructures Austria¹². The initial idea was to create an informal group of individuals involved in repository management who could freely exchange information about long-term archiving and repositories, regardless of the system used. Today, RepManNet has over 160 members from approximately 50 institutions. With its various working groups focused on topics such as accessibility, metadata, certification, university publications, and expert presentations on different aspects of repository management, it has become an integral part of the library community.

From the outset, International networks have also been crucial for the further development of PHAIDRA services. The University Library of the University of Vienna became a member of COAR (Confederation of Open Access Repositories)¹³ and has also collaborated with EUROPEANA. The "Europeana Libraries" project¹⁴ has enabled numerous books and archival materials to be digitized and made available to the public. At the national level, the e-infrastructures Austria (2014-2016)¹⁵ and e-infrastructures Austria plus (2017-2019) projects were particularly important for connecting universities and other research institutions in Austria, creating added value for everyone involved.

With the launch of the European Open Science Cloud in 2018, PHAIDRA gained another partner for integration into the European Open Science Network. This integration had already started in 2010 through the project partnership with OpenAIRE¹⁶, the research and innovation funding program of the European Union.

Further networking opportunities in the field of research data management were provided by the Federal Ministry of Education, Science and Research through the FAIR Data Austria project¹⁷ (2020–2022). This project, along with the Shared RDM-Services

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¹⁰ All PHAIDRA Services systems at a glance: https://datamanagement.univie.ac.at/

¹¹ Details on RepManNet: https://datamanagement.univie.ac.at/forschungsdatenmanagement/

¹² https://e-infrastructures.univie.ac.at/

¹³ https://www.coar-repositories.org/

¹⁴ https://pro.europeana.eu/project/europeana-libraries

¹⁵ https://e-infrastructures.univie.ac.at/

¹⁶ https://www.openaire.eu/

¹⁷ https://forschungsdaten.at/fda/

project that started in July 2023, is part of the Research Data Cluster¹⁸ and aims to create synergies between the offerings of individual universities.

Since 2020, PHAIDRA has been organizing PHAIDRAcon¹⁹, an annual conference focused on repositories and long-term archiving. With international participation, the conference provides varied perspectives on the topic, offering numerous lectures, workshops and discussions. In the early years, the conference was held online. In 2023 and 2024, it was held in person at the University of Vienna, with many participants from Austria and abroad.

The PHAIDRA team is also heavily involved in education and training, such as the University program "Libraries and Information Studies," and offers lectures and workshops nationally and internationally.

3. Research Support with PHAIDRA Services

Working in collaboration with the IT Support for Research at the Vienna University Computer Center, the department now offers various storage systems, research support tools, and PHAIDRA add-ons²⁰. One such add-on is YARM for PHAIDRA²¹, a specialized version of the reference manager YARM. This tool assists users in systematically collecting metadata for individual Phaidra objects. The department also operates the UNIDAM Digital Asset Management System for teaching and research at the University of Vienna.

Due to their combined library and academic expertise, the PHAIDRA Services staff play a crucial role in bridging the gap between researchers and the repository. The close collaboration with the Vienna University Computer Center has led to the development of suitable systems and services for the long-term archiving and presentation of scholarly materials, including those with sensitive content.

Through both group and individual training sessions, which are open to all members of the University of Vienna, working with PHAIDRA is becoming an increasingly routine part of the research process.

¹⁸ https://forschungsdaten.at/

¹⁹ Information on PHAIDRAcon: https://phaidracon.univie.ac.at/

²⁰ All PHAIDRA services at a glance on one poster: https://phaidra.univie.ac.at/o:1613991

²¹ https://datamanagement.univie.ac.at/ueber-phaidra-services/phaidra-add-ons/yarm-for phaidra/



Img. 2: Current advertising card for PHAIDRA-Services (https://phaidra.univie.ac.at/o:1640447)

As of February 1, 2023, PHAIDRA offers a new, user-friendly interface. It now integrates stored datasets into the global Semantic Web using RDF programming and controlled vocabularies. As PHAIDRA is designed as a self-service platform, one key challenge remains: providing a repository that is easy for all university members to use, across all academic disciplines.

Various internal and external services and providers now harvest PHAIDRA objects. These objects can be found in common web search engines, Europeana²², the BASE search engine²³, and the University Library Vienna's local search engine, u:search²⁴. Additionally, the University of Vienna's academic publications have been archived using a PHAIDRA application since 2021.

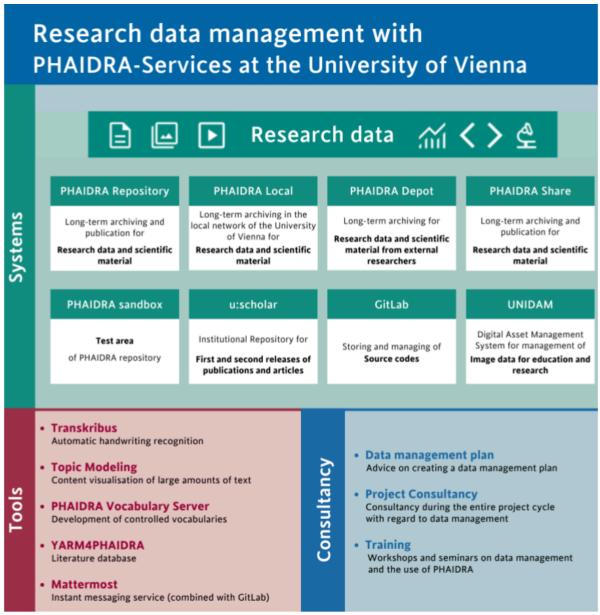
Participation in numerous EU projects²⁵ facilitates collaboration and professional exchange with key national and international stakeholders in long-term archiving and repository management. These collaborations drive the continuous development of the software and services offered at the University of Vienna. At the same time, PHAIDRA's expertise as a project partner is highly valued.

²² https://www.europeana.eu/de

²³ https://www.base-search.net/

²⁴ https://datamanagement.univie.ac.at/ueber-phaidra-services/phaidra-add-ons/yarm-for phaidra/

²⁵ List of national and international project partnerships: https://datamanagement. univie.ac.at/ueber-phaidra-services/anbindung-an-projekte/



Img. 3: Current offers from PHAIDRA-Services (https://phaidra.univie.ac.at/o:1613991)

4. Summary

Over the past 16 years, University of Vienna members have archived over one million items in the PHAIDRA repository. These items range from videos, audio files, and texts to images and research data of all formats. The vision of creating a digital treasure trove of scholarly materials from across all disciplines at the University of Vienna, preserved for the future and accessible to the public, has become a reality. As a result, PHAIDRA is a vital component of the University of Vienna's Open Science initiatives.

Further reading:

- Blumesberger, S. (2019). Das RepManNet das österreichische Netzwerk für RepositorienmanagerInnen. Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare, 72(1), 160–163.
 https://doi.org/10.31263/voebm.v72i1.2291
- Blumesberger, S. (2018). Neue Anforderungen viele offene fragen. Zu den vielfältigen Rollen von Repositorien am Beispiel der UB Wien. Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare, 71(1), 149–161.

https://doi.org/10.31263/voebm.v71i1.2003

- Blumesberger, S. (2017). "Herausforderungen für Repositorien!?" Tagung anlässlich 10 Jahre Phaidra an der Universität Wien (Wien, 24. Oktober 2017). Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare, 70(3–4), 372–376.
 - https://doi.org/10.31263/voebm.v70i3.1960
- Blumesberger, S. (2009). Wissen intelligent und sicher archivieren, verbreiten und nutzbar machen. Phaidra – Das innovative digitale Langzeitarchivierungssystem der Universität Wien. Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare, 62(2), 7–17.
- Edler, S. (2022 ff). Blogbeiträge zu PHAIDRA auf der Plattform "Österreich forscht". https://www.citizen-science.at/blog/blogger/phaidrawien
- Gasteiner, M. (2023). ResearchLibraryPodcast RLP040. "15 Jahre PHAIDRA an der Universität Wien. Ein Gespräch mit Susanne Blumesberger" (29. Dezember). https://rlp.univie.ac.at/?pod-cast=rlp040-15-jahre-phaidra-an-der-universitaet-wien-ein-ge-spraech-mit-susanne-blumesberger (ca. 30 Minuten)
- Hagmann, D. (2018). Überlegungen zur Nutzung von PHAIDRA als Repositorium für digitale archäologische Daten. Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare, 71(1), 53–69.
 https://doi.org/10.31263/voebm.v71i1.1974
- Torggler, A., & Andrae, M. (2018). Aus dem Leben einer/s Repman ein Bericht aus dem österreichischen "Netzwerk für RepositorienmanagerInnen".
 Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare, 71(1), 107–124.
 https://doi.org/10.31263/voebm.v71i1.1986

Authors:

Mag.a Dr.in Susanne Blumesberger, MSc

ORCID iD: https://orcid.org/0000-0001-9018-623X

Universität Wien, Bibliotheks- und Archivwesen susanne.blumesberger@univie.ac.at

Mag.a Sonja Edler, MSc

Mag. Martin Gasteiner Universität Wien, Bibliotheks- und Archivwesen martin.gasteiner@univie.ac.at

Victoria Eisenheld, BA Universität Wien, Bibliotheks- und Archivwesen victoria.eisenheld@univie.ac.at

Univ.-Prof. i.R. Mag. Dr. Herbert Van Uffelen Universität Wien, Bibliotheks- und Archivwesen herbert.van-uffelen@univie.ac.at

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