Implementation of the CoreTrustSeal

The CoreTrustSeal board hereby confirms that the Trusted Digital repository Edition Topoi Collections complies with the guidelines version 2017-2019 set by the CoreTrustSeal Board.
The afore-mentioned repository has therefore acquired the CoreTrustSeal on August 10, 2017.

The Trusted Digital repository is allowed to place an image of the CoreTrustSeal logo corresponding to the guidelines version date on their website. This image must link to this file which is hosted on the CoreTrustSeal website.

Yours sincerely,

The CoreTrustSeal Board

Assessment Information

Guidelines Version: 2017-2019 | November 10, 2016
Guidelines Information Booklet: [CTS Requirements 2017-2019](#)
All Guidelines Documentation: [Documentation](#)

Repository: Edition Topoi Collections
Seal Acquiry Date: Aug. 10, 2017

For the latest version of the awarded   https://www.coretrustseal.org/why-certification/certified-repositories/
CoreTrustSeal for this repository:

Previously Acquired Seals: None

This repository is owned by: **Excellence Cluster 264 Topoi**

                                      Berlin
                                      Germany

                                      T +49 30 2093-98072
                                      E collections@topoi.org
                                      W http://www.edition-topoi.org/

Assessment

0. Context

Applicant Entry

Self-assessment statement:

(1) The Edition Topoi (http://edition-topoi.org/) of the Excellence Cluster 264 Topoi of Humboldt-Universität zu Berlin and Freie Universität Berlin (http://www.topoi.org/) is an open access publication and research platform, which serves both as a publication platform for the Cluster's peer-reviewed book series (http://edition-topoi.org/books/books) and open access journal eTopoi (http://edition-topoi.org/publications), and as a repository for research data (http://repository.edition-topoi.org/).
Edition Topoi is a domain repository. It is subject-based on Ancient Studies and is institutionally hosted by the Humboldt-Universität zu Berlin (see also the website of the research data management of the Universtiy: https://www.cms.hu-berlin.de/en/dl-en/dataman-en/welcome?set_language=en).

(2) The Edition Topoi research platform is an innovative and sustainable information infrastructure. It is used to publish and archive citable research data, such as 3D models, high-resolution photography and presentations of scientific and technical nature as well as data and their associated databases and database systems. Its publications are aimed at both the academic community from the fields of Ancient Studies and for the general public.

(3) All Edition Topoi contents are subject to quality control (peer-reviewing). All content is curated, enhanced and computational. Every digital resource in the repository is stored as 'Citable', meaning it is connected with a DOI (https://www.doi.org/) and a specifying JSON-file that contains metadata and archival information about the object. Through this, software packages like Mathematica or IPython can directly load the digital resource - for example an image or a 3D model - and perform further analysis like image recognition, compute volumes or search text in multiple documents simultaneously. The intention of the Edition Topoi Collections is not only to visualize research data and digital objects of cultural heritage but to also offer the possibility to use the data as computable objects.
Integrity of original copies is maintained and provided to download in its original state and in some cases the visualization for the web operates using extra copies. The PID system and version control assures the documentation of changes of the data.

(4) Edition Topoi is institutionally related to the Humboldt-Universität zu Berlin and the Freie Universität Berlin. The Humboldt-Universität zu Berlin is the storage provider of the repository's content. The Service Level Agreement (see attachment Doc1) defines the general necessary requirements (1), the necessary requirements for technical aspects (2) and the regulations concerning access into the server room (3). The Humboldt-Universität zu Berlin is contractual partner of DataCite (TIB Hannover, https://www.tib.eu/en/publishing-archiving/doi-service/datacite/), which mints and manages the persistent identifiers (DOI) for Edition Topoi . The Humboldt-Universität zu Berlin's document server is certificated by DINI (see http://dini.de/dini-zertifikat/liste-der-repositorien/).

(5) Edition Topoi's co-operative partners are Berlin-Brandenburg Academy of Sciences and Humanities, the German Archaeological Institute, the Max Planck Institute for the History of Science and the Prussian Heritage Foundation (http://www.topoi.org/partners/host-institutions/). All institutions work together in different projects within the Excellence Cluster 264 Topoi and create research data that can be published in the Edition Topoi Collections.

At the Berlin -Brandenburg Academy of Sciences and Humanities, research into Greek and Roman inscriptions, coins and medical texts has been underway since the 19th century, as has the study of the Egyptian language.
The German Archaeological Institute is one of the leading globally active institutions in the fields of archaeology and ancient studies. A total of fifteen departments conduct research on four continents.
The Max Planck Institute for the history of Science explores how new categories of thought, proof and experience have developed over centuries of interaction between the sciences and the cultures in which they are embedded.
The Stiftung Preussischer Kulturbesitz oversees the Staatliche Museen zu Berlin, the Staatsbibliothek zu Berlin and other importand archives and research institutions. The Staatliche Museen are among the largest Universal museums in the world. In a total of fifteen collections, they document the cultural development of mankind from its beginnings to the present.

The research is further supported by related disciplines from the additional partners: Technische Universität Berlin, Brandenburg Technische Universität Cottbus-Senftenberg, Universität der Künste Berlin, Hochschule für Technik und Wirtschaft Berlin, Medizinhistorisches Museum der Charité Berlin, Brandenburgisches Landesamt für Denkmalpflege und Archäologisches Landesmuseum.

International cooperation partners are the Institute for the Study of the Ancient World, New York (USA), University College London (UK), École normale supérieure de Paris, Laboratoire d'excellence TransfereS (France), Faculty of Archaeology, Leiden University (The Netherlands).

Members of the above-mentioned institutions are interconnected and work together in many different research projects within the Excellence Cluster 264 Topoi (http://www.topoi.org/research/).

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

1. Mission/Scope

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) All institutional partners of the Cluster are signatories of the Berlin Declaration on Open Access to Knowledge in the Sciences and the Humanities. All content stored and archived on the repository is published accordingly to its principles and paradigms. (https://openaccess.mpg.de/Berlin-Declaration)

(2) In 2016 the Excellence Cluster 264 Topoi initiated a mission statement to the Berlin Declaration which aims to encourage the scholarly world to open up its digital repositories to interoperability and computational access. Both speakers of the Excellence Cluster 264 Topoi and the directors and presidents of its affiliated partner institutions have signed the mission statement publicly. All research data published on the repository like digitized texts, images, 3D models or database content is stored and archived according to this mission statement. All content is archived for long-term usage, quality assured, individually referable, citable, computationally accessible and able to be processed.

http://www.edition-topoi.org/pdf/20160418_Edition_Topoi_Mission-Statement2016.pdf

http://edition-topoi.org/publishing_with_us/open-access

http://www.topoi.org/news/open-access-forschungsdaten-uneingeschrankt-und-zitierfahig-publizieren/

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

2. Licenses

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The repository is not a legal entity in its own right. It is run by the Humboldt-Universität zu Berlin. Consequently, all contracts are drawn up between the Humboldt-Universität zu Berlin, represented by the Director of the University Library, and the Excellence Cluster 264 Topoi, represented by its directors.

(1) All data suppliers who wish to publish digital content on the repository are entered into contracts with Topoi.

Impressum of Edition Topoi:
http://www.edition-topoi.org/publishing_with_us/imprint (for english of the copyright notes, see attachment Doc7, section 9)

(2) Deposits are handled in a case-by-case approach. The Excellence Cluster 264 Topoi has also established scientific co-operations with cultural heritage institutions, eg. Prussian Heritage Foundation. Most content is published under open content licenses (preferable CC-BY, see https://creativecommons.org/), and in some cases specific license terms given by the rights owner are provided on the open access platform. The conditions for re-use are made available on each data entry. Data that does not meet the legal requirements, will not be published on the repository.
Example for data entry under CC-BY:
http://repository.edition-topoi.org/collection/BDPP/object/5

(3) Within the legal framework, users are entitled, to use, download and save the data for scientific purposes.
All items stored on the repository are freely accessible, no log-in is required (see
http://www.edition-topoi.org/publishing_with_us/open-access. For English, see attachment Doc7, section 2).

(4) It is the data supplier's responsibility to ensure that all data provided is in accordance with German Copyright Law. In case of noncompliance of provided data with the law, the data will not be published. In case of violation of third-party rights, the data supplier shall indemnify the Humboldt-Universität zu Berlin from all claims and costs asserted by third-parties.

(5) There are a number of specific codes of conduct applicable to the repository and each collection, e.g. HU Forschungsdaten-Policy (https://www.cms.hu-berlin.de/de/dl/dataman/hu-fdt-policy/view?set_language=de), DFG ethical Codes of Conduct and DFG Rules of Good Scientific Practice (http://www.dfg.de/en/research_funding/principles_dfg_funding/good_scientific_practice/), HU and FU Rules of Good Scientific Practice (https://www.hu-berlin.de/en/research/services/sicherung-guter-wissenschaftlicher-praxis?set_language=en / http://www.fu-berlin.de/service/zuvdocs/amtsblatt/2002/ab292002.pdf). The codes of conduct coincide with generally accepted codes of conduct for research data in Germany.

(6) Before accepting the data for publication on the repository, the data and content-relevant metadata is quality checked by the data management team (see http://www.edition-topoi.org/publishing_with_us/collections. For English, see attachment Doc7, section 5).

(7) No sensitive data is published on the repository.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

3. Continuity of access

Minimum Required Statement of Compliance:

    0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

    3. In progress: We are in the implementation phase.

Self-assessment statement:

(1) The Excellence Cluster 264 Topoi is financed by the federal-state initiative "Excellence Strategy" of top-level research until December 2018 (funding period has been extended until 12/2018, see
http://www.dfg.de/download/pdf/foerderung/programme/exzellenzstrategie/zeitplan_exzellenzstrategie.pdf).

(2) Renewal proposals are in process.

(3) The follow-up seven year funding period starts in January 2019 (see
http://www.dfg.de/en/research_funding/announcements_proposals/2016/info_wissenschaft_16_59/index.html).

(4) In the event that the renewal proposals are not successful, custody is fully transferred by contract to the Humboldt-Universität zu Berlin. The University will be responsible for the sustainable development of the repository and will guarantee the accessibility and long-term availability of the data.
(see http://www.berliner-antike-kolleg.org/rem/edition-topoi. The Berliner Antike-Kolleg builds upon the gained insights and cooperations of the Excellence Cluster 264 Topoi and develops these further beyond a temporary collaboration into a long-lasting and inter-institutional research platform,
http://www.berliner-antike-kolleg.org/bak).

(5) The requirements relating to publication platform data were clarified and refined withiin the context of the Cluster's active involvement in relevant digital humanities projects
(CLARIN – European Research Infrastructure for Language Resources and Technology, and DARIAH – Digital Research Infrastructure for the Arts and Humanities), and in close co-operation with the data publication platforms of its partner institutions (IANUS – Research Data Center for Archaeology and Ancient Studies at the DAI)
as well as with the central computing services of the universities.
The Excellence Cluster 264 Topoi is currently working with the Humboldt Universität zu Berlin to design a framework for the integration of research data into existing IT infrastructures, with the aim of allowing research within the digital repositories of Edition Topoi to be carried out from anywhere in the world via search portals.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

This is acceptable even though Edition Topoi is in the implementation phase. They are moving towards "fully implemented" and have a plan to ensure the availability of data if the renewal proposal is not successful.

4. Confidentiality/Ethics

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) Handling of research data responsibly is fundamental for the repository. All data is published in accordance to the conventions and standards of the scientific community. The Open Data Declaration of the Humboldt-Universität zu Berlin (Open Access Erklärung der Humboldt-Universität zu Berlin, https://edoc-info.hu-berlin.de/en/terms-of-use/open-access-declaration/open-access-declaration-of-the-humboldt-universitaet-zu-be recommends making research data as well as scholarly publications available.

(2)All data suppliers are contractually obligated to ensure that personal data, copyrights and legitimate interests of third parties are protected (Contract template attached, Doc2).

(3) Written permissions for third party content have to be provided by the data supplier.

(4) Data with disclosure risk won't be published on the repository.

(5) All data is quality checked by the data management team. The editorial staff (http://edition-topoi.org/publishing_with_us/imprint) for the data publications meets on a regular basis to discuss the quality, the integrity and the scientific value of the data. Necessary requirements - for example museum permissions - are also reviewed. Additional legal advice is given by the research data management team of the Humboldt-Universität zu Berlin.
In the event that the data is accepted for publication, automatic quality checks process the data before the collection is published online. This includes Checksum for the data and revision of legal issues and contracts. Databases and digital resources of a collection underlie constant opposed testing while data is converted into Citables (see also http://edition-topoi.org/publishing_with_us/citable. For English, see attachment Doc7, section 6).

(6) The data stored on the repository is made available in accordance with the following policies:
Open Access

Policy: https://edoc-info.hu-berlin.de/en/terms-of-use/open-access-declaration/open-access-declaration-of-the-humboldt-universitaet-zu-b
RDM Policy: https://www.cms.hu-berlin.de/de/ueberblick/projekte/dataman/hu-rdm-policy/view
Berlin Declaration on Open Access: https://openaccess.mpg.de/Berliner-Erklaerung
Rules of Good Scientific Practice / German Research Foundation (DFG):
http://www.dfg.de/en/research_funding/principles_dfg_funding/good_scientific_practice/
Research data managment
Policy: https://www.cms.hu-berlin.de/en/dl-en/dataman-en/info/policy/research-data-management-policy?set_language=en

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

It would be useful to state explicitly and publicly what measures are in place if conditions are not complied with.

5. Organizational infrastructure

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The Edition Topoi of the Excellence Cluster 264 Topoi (www.topoi.org) is hosted by the Humboldt-Universität zu Berlin (see https://www.exzellenz.hu-berlin.de/en/clusters-of-excellence?set_language=en). The University is contractually obligated to ensure long-term stability and sustainability of the repository (see also the contract template attached, Doc2, especially signatories and sections 3 & 4).

(2) The Excellence Cluster 264 Topoi is part of the German Universities Excellence Initiative of the German Federal Ministry of Education and Research and German Research Foundation (see http://www.dfg.de/en/research_funding/programmes/list/projectdetails/index.jsp?id=39235742&sort=nr_asc&prg=EXC, and http://gepris.dfg.de/gepris/projekt/39235742?language=en).

(3) The repository's staff (http://edition-topoi.org/publishing_with_us/imprint) undergoes regularl training programs (in-house and out-house training) and has access to professional development.

(4) The repository is the publication platform of the Excellence Cluster 264 Topoi. It is based in the Berlin-Brandenburg region, and combines the region's strengths in ancient studies. It is supported by its institutions, namely the Humboldt-Universität zu Berlin and Freie Universität Berlin, and is the product of four major institutions involved in research into antiquity: Berlin Brandenburg Academy of Sciences in the Humanities, the German Archaeological Institute, the Max-Planck-Institute of the History of Science and the Prussian Heritage Foundation. On an international level, the Excellence Cluster 264 Topoi been building a network with the most renowned institutions in ancient studies: Institute for the Study of the Ancient World (New York), University College London (UK), Cambridge University (UK), the École normale supérieure de Paris, Laboratroire d'excellence TransfereS (France), Institute for Archaeology, University Leiden (The Netherlands). Exchange with these institutions is conducted on various levels of co-operations, including scanning and 3D modeling campaigns of cultural heritage items.

See also https://www.international.hu-berlin.de/de/internationales-profil/forschung-international/exzellenzcluster-topoi/exzellencluster-topoi?

(5) Editors in charge for the Edition Topoi are the directors of the Excellence Cluster 264 Topoi (http://www.topoi.org/people/contact/, http://edition-topoi.org/publishing_with_us/contact), for the Collections especially Prof. Dr. Gerd Graßhoff (http://www.topoi.org/person/grasshoff-gerd/).

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

6. Expert guidance

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The Excellence Cluster 264 Topoi is the product of co-operation with the four major institutions in Berlin involved in research into antiquity: The Berlin Brandenburg Academy of Sciences and Humanities, the German Archaeological Institute, the Max Planck Institute for the History of Science and the Prussian Heritage Foundation (http://www.topoi.org/partners/host-institutions/).

(2) Since the formation of the Cluster in 2007, the institutions involved in Topoi have brought about a paradigm shift towards co-operation and communications in the fields of open-access and data publishing in the Humanities. Edition Topoi gives this process a new footing (http://edition-topoi.org/publishing_with_us/open-access, and http://www.topoi.org/knowledge-transfer/edition-topoi/open-access/).

(3) Through consistent digital publication of research results and the provision of digital resources, Edition Topoi contributing significantl to the development of new forms of scientific work (http://www.topoi.org/knowledge-transfer/data-publication/).

(4) The Excellence Cluster 264 Topoi establishes scientific co-operations for the digitization of objects from the realm of cultural heritage. These co-operations not also involve researchers, but also data science experts and technical members.

https://www.topoi.org/partners/research-equipment/
http://de.digitalclassicist.org/berlin/

Example of co-operation between the Excellence Cluster 264 Topoi and the Staatliche Museen zu Berlin:
http://repository.edition-topoi.org/collection/MAGN

(5) The Excellence Cluster 264 Topoi has also both in-house and external advisors. The Excellence Cluster 264 Topoi and its advisors regularly meet in order to discuss data publications as well as new technologies (http://www.topoi.org/people/directors-and-boards/)

(6) An external editorial board for the Edition Topoi Repository will be established.

(7) Additional network of experts and regular exchange is provided by the Cluster's associate partner Interdisziplinärer Forschungsverband Digital Humanities in Berlin (http://www.ifdhberlin.de).

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

7. Data integrity and authenticity

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) Integrity
The data of each collection on the Edition Topoi Collections forms a closed unit and contains a certain number of research objects, which may be supplemented and up-dated in terms of content. The integrity of the overall project is thereby monitored by Checksums (MD5/SHA1) regarding the technical aspects and is also tested automatically by registering the DOI at Datacite. To register a DOI correctly the metadata has to fulfill a minimum of requirements in order to assign the DOI. The information belonging to a digital resource is also quality checked as a result of this process.
In addition, it is possible to download a JSON file on the homepage of each collection (or bag) containing the whole content of a specific database including its technical and contextually relevant metadata.
The version control for all digital objects is ensured, as each possible update or change of a digital entry is assigned with a new DOI while the older version together with its DOI remains valid.
The specifications from Datacite in order to register a DOI are built on standard metadata schemes including a number of mandatory fields. This leads to a minimum standard for every project in the Edition Topoi Collection which is equal for all projects. The mandatory fields to register a DOI with Datacite are (as described in the guidelines) the DOI itself, the title, the author, publisher and publication year. These necessary criteria plus the licence information are compulsory for every digital resource in the repository. The information is displayed on every resource/Citable (under 'General information' and 'Conditions for use') on the website. Provided the digital resources fulfil the necessary criteria for inclusion in the Collection, the individual data will allocate DOIs. Through the allocation of a DOI the data can be easily cited in the long term.
The metadata schema of the Edition Topoi Collections as described in the documents listed below is based on the DataCite Metadata Schema:
https://schema.datacite.org/

Additionally, every discipline in the academic field refers to guidelines of good scientific practice as well as a certain range of accepted standards and readings with regard to the origin and quality of research data. These standards are overseen by the reviewes before a project is accepted to be published in the Edition Topoi.

(2) Authenticity
The data supplier maintains responsibility that all provided data does not infringe upon third-party rights. These duties are mutually agreed upon via contract. Changes of the content of the repository can only be made with the data supplier's consent.
The metadata includes the relevant information about authorship, members of the research group and the license terms for every digital content. It is not possible to upload data or even change the data without contacting the repository's data management team.

Requirements and metadata scheme for data suppliers:
http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData1.pdf
http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData2.pdf

Internal documents for preparation of the data for ingest are attached (Doc3-Doc6).

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

8. Appraisal

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The Edition Topoi is an academic platform for the research into antiquity. All published data results from research projects that are encompassed by the Cluster. The Cluster involves 30 traditional disciplines from various academic fields as archaeology, the Humanities, Classics, cultural studies but also natural sciences.
Every single digital resource published on the Edition Topoi is subject to quality control. According to the data management plan (for a checklist see https://www.cms.hu-berlin.de/de/dl/dataman/DMP-notes/view and also http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData1.pdf, section 2.2), the data and all relevant metadata have to be submitted in the required formats. The completeness of the data as well as the quality of the data is checked by the data management team.
Internal scripts are used to check the completeness (i.e. Checksums) and quality. Regarding completeness, the researcher (data provider) is responsible for the amount of data that is handed in for publication. The Edition Topoi aims to publish concluded sets of data; it is, however, always possible to add new data and research results to a specific collection. The quality control is part of the editorial discussions of the data management team, including external advice due to the variety of subjects.

(2) All digital data is published as soon as it is assigned to a Citable and related to a DOI. In order to recieve a DOI, it is mandatory to specify a defined minimum of metadata. Data that cannot be supplied with sufficient metadata are automatically dismissed in the process of registration by the contractual partner Datacite (see also http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData2.pdf, section 3, as well as attached documents Doc2-Doc6).

(3) Research in the Excellence Cluster 264 Topoi is multidisciplinary. The number of scholarly subjects involved are archaeology, philosophy, history, linguistics and literary studies, physical geography, cultural studies and Classics. The spectrum of different disciplines in the humanities and cultural studies requires that the formats for the materials provided are not restricted. Although, in terms of the technical implementation of the data, for the long time storage in the Edition Topoi, the data provided is converted into Citables by the Edition Topoi (see http://www.edition-topoi.org/publishing_with_us/citable. For English, see attachment Doc7, section 6). In doing so the data is available to download in its original state and can also be visualized with common tools and web viewers. The use of specially developed web tools may be enhanced according to the requirements of each discipline but is not in itself a criterion for the long-term archiving and accessibility of the data.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

9. Documented storage procedures

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The import of data into the repositories is undertaken by internal Python scripts, which also output and document errors while importing. The data is managed with CouchDB (http://couchdb.apache.org/) that also allows checking of consistency of the imported data. Checksums are taken in addition to this.

(2) Only the administrators (editorial staff) are allowed to carry out changes for the import scripts and the CouchDB. Backups are run daily.

(3) Apache style access logs are used to detect intrusions and unusual, disruptive or even damaging activities from users. After a certain amount of time the access logs are anonymized and used for the calculation of usage statistics.

(4) All procedures for disaster recovery - especially for the underlying infrastructure like the storage area network, database- and backup-service or the network-management - are well documented from different teams in the Computing Center responsible for the different services. Additionally Nagios and RAID systems are used to monitor the hardware.

(5) The security and disaster recovery plans for all the services and servers operated by the Computer and Media Service of the Humboldt-Universität zu Berlin are based on the "IT-Grundschutz-Katalog" of the Bundesamt für Sicherheit in der Informationstechnik (BSI).

https://www.bsi.bund.de/DE/Themen/ITGrundschutz/ITGrundschutzKataloge/itgrundschutzkataloge_node.html

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

10. Preservation plan

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The repository is not a legal entity of its own, it is run by the Humboldt-Universität zu Berlin. The Humboldt-Universität zu Berlin has the legal rights to guarantee long-term preservation and to take legal action. See https://edoc-info.hu-berlin.de/en/terms-of-use/policy/policy?set_language=en, section 2 (there will be a new version in place by the end of 2017 that will include a stronger emphasis also on research data!).

(2) There are individual contracts between the depositor or data supplier, the Humboldt-Universität zu Berlin and the Excellence Cluster 264 Topoi. The contract covers the following actions: subject matter of the contract, granting of rights (eg. CC Licenses) and compensation in case of violation of the law, long-term preservation (see attached document Doc2).

(3) The Humboldt-Universität zu Berlin is contractually entitled to reproduce, process, store and migrate or decompile the data and to make them available in other databases as part of national or international collective orders for online provision and archiving.

(4) A preservation plan is provided by the Computer and Medien Service (CMS) and the Universitätsbibliothek (UB) of Humboldt-Universität zu Berlin (see also https://www.cms.hu-berlin.de/de/dl/dataman/policy/policy-en/rdm-eng-policy/rdm-policy?set_language=de: "Humboldt-Universität zu Berlin has commited itself to establishing the means to enable this policy to be fulfilled").

(5) Actions relevant for preservation, including the unlikely event of custody transfer, is part of the contract between the data supplier and the Humboldt-Universität zu Berlin.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

11. Data quality

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) For the Edition Topoi each published digital resource is a self-contained, citable and long-term archived publication. It is quality assured, individually referable and computationally accessible and able to be processed. Therefore, all materials provided have to meet the high standards and requirements established by the Edition Topoi (see also http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData1.pdf and http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData2.pdf, section 2).
The data-management plan is used to reflect on and communicate the way they will deal with their data. Edition Topoi has developed a data management checklist comparable to the guidelines for printed publications (see attached document Doc6, and http://www.topoi.org/wp-content/uploads/2010/12/EdT_Guidelines_201411_November2014.pdf. Additionally documents attached Doc3-Doc6 include a check for completness of metadata information). Since the Designated Community is multidisciplinary, it is important that all materials provided are quality checked in a case-by-case approach. This level of quality is reached by a quality check of the data provider himself, since the data is published with regard to the researcher/author.
Since the author does not have the experience to evaluate the data alone, all materials provided plus the metadata is also quality checked by the data-management team and the editors of the repository. An external editorial board for the repositories will be established. Additionally, the assigning of DOIs and the registration of the single repositories at the harvesting platform re3data.org (http://www.re3data.org/) ensure a high standard of whomever the resource is describes. Therefore, all the data that is accessible in the Edition Topoi is citable and available for the scientific community according to the demands of good scientific practice.
For every 'Citable' in the Edition Topoi Collection, a recommendation for the citation is given on the website as well as the possibility to download the 'Citable' itself (as describing JSON file and also the original dataset), see Doc8-Example based on DOI: 10.17171/1-1-146 and attached Cite-File Citable1 and Citable2.

(2) It is not possible to comment or rate the data. This is because the Edition Topoi Collections considers itself a basis archive for research data. The interpretation and use of the data is not the main intention of the repositories. Although tools are provided to visualize the data and innovative possibilities are given to implement the data directly or download it (for further use of the data, not only to display it), the effective analysis and processing of the data is the responsibility of each researcher that uses the repositories under a Creative Commons licence.

(3) Furthermore, the landing pages of the single repositories offer the possibility to add further information to the dataset. This can include supplementary bibliographical notes (which can also be added to the single Citables), external links or other information connected with the research objects and the data within the repository.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

12. Workflows

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The diversity of the contents of the repositories in the Edition Topoi as a result of research in different fields and the use of different methods (hence different file formats) makes an editorial support for the preparation of the data aimed to publish in the repositories necessary. As soon as an agreement in principle about the acceptance of a data set in terms of quality and license issues is clarified, the data can be adjusted to the requirements of the Edition Topoi. Final decisions are made by the directors of the Excellence Cluster 264 Topoi, who are also editors of the Edition Topoi (see http://www.edition-topoi.org/publishing_with_us/imprint. For english, see attachment Doc7, section 9).
The Edition Topoi has established workflows for its book series and journal as well as for the publication of research data (see attached document Doc3-Doc6).
The Edition Topoi and the data supplier enter contracts in which the handling of the data is explained (see attached document Doc2).
Terms of use for the Website as well as for each collection explain the users' rights and responsibilities (see http://edition-topoi.org/publishing_with_us/open-access, for english, see attachment Doc7, section 2).

(2) The process of ingest and information about the persistent identifier system for guaranteeing a long term storage and availability is described in the two documents "Publishing of digital research data I & II":
http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData1.pdf

http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData2.pdf

The integration into the technical system of the Edition Topoi is been carried out automatically to a large extend, after the data is prepared and provided by the researcher according to the specifications that have been mutually agreed upon between the data supplier and the Edition Topoi. The documentation of the process is archived in the version control and repository manager system "GitLab" for each repository separately.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

13. Data discovery and identification

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

3. In progress: We are in the implementation phase.

Self-assessment statement:

(1) Research data stored on the Edition Topoi is archived for the long-term and is quality assured. It is individually referenceable, citable, computationally accessible and able to be processed. The repository's contents are published together with their metadata.
The research contents and their technical as well as content-relevant metadata published are termed Citable. Citables are JSON-files, which are provided for every single digital resource.
The repository serves to visualize the data. Citables can be sorted into a set of objects and a set of object-related attributes. All Citables are referenced by persistent object identifiers (DOI). The repository and its data are listed and searchable at the Registry of Research Data Repositories (re3data.org, www.re3data.org). The DOI Citation Formatter helps to reference the data by providing a full citation for different citation styles. Citables can be downloaded and stored locally and are transferrable.

(2) The web page of the Edition Topoi Collections (http://repository.edition-topoi.org/) offers an overview of available repositories that can be filtered beforehand using the four following categories: Subject, Resource type (of the data in the certain collection), Geolocation (main region of the provenance of the research objects that are the basis for the digital data) and time period on the left side of the screen.
Every collection is divided into an overview page
(e.g. http://repository.edition-topoi.org/collection/BSDP/overview), a metadata page for this special collection (http://repository.edition-topoi.org/collection/BSDP/metadata) and a Search page for this special collection (http://repository.edition-topoi.org/collection/BSDP/search) which are all accessible from the homepage of each collection.
The search interface offer again different sets of filters, depending of the content and the research objects of each collection. These filters vary in each collection but are always divided into categories according to the content concerning the research object (i.e. an ancient Sundial) and into categories with regards to the digital ressources that are available within these collections (i.e. 3D models or images etc.).
Clicking on the 'Cite' icon leads to detailed views of the chosen objects. The 'Cite' icon expands the metadata information for this object in a detailed view (i.e. http://repository.edition-topoi.org/collection/BSDP/single/0514/0) which is always connected to the object and is also always visible. The metadata is based on the standard metadata scheme of Datacite (https://schema.datacite.org/).

(3) The implementation of the data in catalogs and search engines is an ongoing progress and is featured in the application for the continued financial support for the Excellence Cluster 264 Topoi. This project will be conducted in collaboration with the Deutsche Digitale Bibliothek (DDB; https://www.deutsche-digitale-bibliothek.de/)

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

14. Data reuse

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) In addition to the required and registered metadata for the use of the PID-system all the metadata for the digital resources are available within the single Citables, which provide the basis for every image resource (metadata schema and requirements are described here: http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData2.pdf). Citables are JSON-files, which contain all information pertaining to the resources including the allocation of the data and information about the correct tool to visualize the data (examples attache, Citable1 and Citable2). The JSON file format is computational and thus offers high-level transparency for future adjustments (see also http://www.edition-topoi.org/publishing_with_us/citable. For English, see attachment Doc7, section 6).

If possible, the data itself is provided in open file formats intended for higher interpretability and readability in the scientific community. Thus, the use of the Creative Commons licenses allows for widespread and easy adaption of current developments in the data (for further information about the preferred CC licence see https://creativecommons.org/licenses/by-nc-sa/3.0/de/legalcode).
Most of the Edition Topoi's content is published under open content licenses. Thus, in some cases specific license terms given by the rights owner are provided on the repository. The conditions for re-use are made available on each data entry. Data that does not meet the legal requirements, will not be published on the repository.
Within the legal framework, users are entitled to use, download and save the data. All materials stored on the repository are freely accessible, no log-in is required.

(2) Tools to visualize the data are not part of the development of the Edition Topoi. Focus of the Edition Topoi Collections is the long-term archiving of the data and databases. For that reason, the man- and machine-readable JSON Format is used to store all information. The tools to visualize the data are provided wher possible by the editorial staff. The use of open formats to store the data in connection with man- and machine-readable Citables (in JSON) will guarantee the ability to use and read the files stored in the repositories where possible. Thus no extra measures are necessary in order to maintain the future evolution of file formats besides the usual development in this area.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

15. Technical infrastructure

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The multidisciplinarity of the repositories in the Edition Topoi not only requires that the particular standards and avenues of approach of the particular subjects be kept, but also to be as open as possible in order to represent the different standards and specifications. The use of subject-specific standards concerning file formats or nomenclature lies within the responsibility of the researcher as data provider.
At the same time, it is mandatory for every repository to provide a minimum set of metadata (see http://edition-topoi.org/pdf/201701_EdT_Guideline-ResearchData2.pdf) and to offer all data as Citable (see http://edition-topoi.org/publishing_with_us/citable. For English, see attachment Doc7, section 6) under the conditions of Open Access (see http://edition-topoi.org/publishing_with_us/open-access. For English, see attachment Doc7, section 2). This workflow assures a certain quality of the data that is designed for long-term storage through the use of JSON-files and also a high degree in equability of the available information about the data.
This means that, once the repository is running, the assistance needed to maintain the data sets is reduced as much as possible and can easily be managed by the Computer and Media Service (CMS) of the Humboldt-Universität zu Berlin. Since the repositories as a whole are not dependet on special software for archiving the data itself (the JSON files), the running of the Edition Topoi Collection requires mostly server administration (updating libraries, etc.). Future developments in terms of software updates etc. can happen within the regular infrastructural activities of the CMS once the Excellence Cluster 264 Topoi reached an end.

(2) Following the functional model of OAIS (see http://d-nb.info/104761314X/34, page 33) the Edition Topoi is the archive, or connector, between the data provider (producer of the data, the researcher) and the consumer of the data. Researchers who hand in the data in the form of a repository to the Edition Topoi (SIP) are given advice by the editorial staff; the generation of the AIPs (administration, storage and accessibility) takes place at the Edition Topoi under the guidance (management) of the Cluster of Excellence Topoi (http://edition-topoi.org/publishing_with_us/imprint). The DIPs (the research data) can be used by the consumer via the websites of the Edition Topoi (http://edition-topoi.org/).

(3) For the duration of the Excellence Cluster 264 Topoi (www.topoi.org) the requirements as well as the infrastructure and software packages necessary for the Edition Topoi, are permanently updated and adjusted to contemporary standards. The management of software and technical documentation can be found in the version control system GitLab (https://about.gitlab.com/), while every database, dataset and information/metadata belonging to the research data itself is provided online in JSON files. The system of the research platform is designed to keep running without editorial support to guarantee a long term and unchanged accessibility.

(4) The core capabilities of the Edition Topoi are the long term archiving and the accessibility and possibility to cite digital research data. The visualization of the data offered on the website is mainly conducted using external software (open source. For images Digilib: http://digilib.sourceforge.net/, for 3D data http://vcg.isti.cnr.it/3dhop/ etc.). The maintenance and further development of these tools is not specially promoted by the Edition Topoi because the fast progress of the single web viewer cannot be monitored. The Edition Topoi willingly offers these tool for visualization, but the basic system of storage and the research data itself can be used in the long run and cited without these implementations.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

16. Security

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

(1) The Computing Center and the University Library of the Humboldt-Universität zu Berlin (https://www.cms.hu-berlin.de/en/standardseite_collage?set_language=en) are responsible for all Edition Topoi services, its servers and the underlying infrastructure (SAN, Databases, Backup, Network, see https://www.cms.hu-berlin.de/en/dl-en/storage-services?set_language=en), since the Excellence Cluster 264 Topoi and the Edition Topoi are maintained by the Humboldt-Universität zu Berlin and the Freie Universität zu Berlin (https://www.exzellenz.hu-berlin.de/en/clusters-of-excellence?set_language=en, see also 'Applicant institution': http://www.dfg.de/en/research_funding/programmes/list/projectdetails/index.jsp?id=39235742&sort=nr_asc&prg=EXC).

(2) The conditions of the servers are continuously verified from a centralized Nagios-Server, which monitors all of the infrastructure and servers of the Humboldt-Universität zu Berlin. The computing center and its staff member will be the first to be alerted from the Nagios Servers and they will escalate the notifications to the Edition Topoi team if necessary.

(3) The physical servers reside in the central server rooms of the computing center of the University. The server rooms are all equipped with uninterruptible power supplies, redundant air conditioning and controlled access (only some staff members of CMS and UB can enter them, see https://www.cms.hu-berlin.de/de/dl/systemservice/fileservice/san/standardseite).

(4) All of the Edition Topoi Servers reside behind the centrally-managed firewall of the Humboldt-Universität zu Berlin (https://www.cms.hu-berlin.de/de/dl/netze/firewall). The network of the Humboldt-Universität zu Berlin itself is redundantly connected to the German Research Network (DFN, https://www.dfn.de/en/).

(5) The storage area network of the Humboldt-Universität zu Berlin is redundant on all levels (https://www.cms.hu-berlin.de/de/dl/systemservice/fileservice/san/standardseite). Every server uses two FC-HBAs to connect to the SAN and the data is written to two mirrored (RAID1) storage devices (RAID5). These storage devices reside in different buildings of Humboldt-Universität zu Berlin. With that configuration, two HBA or more than one hard drive in the two RAID5 storage devices have to fail simultaneously for potential loss of data. Thus loss of data from hardware malfunction is very unlikely. Data loss from incorrect handling from users or even attacks from inside or outside the Humboldt network can be repaired with the backup system, which keeps deleted

files for at least 60 days.

(6) The Edition Topoi servers use the central backup service of Humboldt-Universität zu Berlin, which operates with the TSM Backup software System (https://www.cms.hu-berlin.de/de/dl/systemservice/fileservice/tsm). All of the backup data is mirrored every night on two large tape storage libraries in two separate buildings of the Humboldt-Universität zu Berlin with about 30km distance to each other. Every data loss or change in the last 60 days can be repaired from the backup service.

(7) The Computer and Media Service (CMS) operates the central network infrastructure of the Humboldt-Universität zu Berlin as well as the connection to the world wide web. This is put into effect through the junction to the German National Research and Education Network, DFN, the communications network for Science and research in Germany as well as the Berlin scientific network BRAIN (https://www.brain.de/home/view). The bandwidth to the internet is at the moment 1 Gbps. The backbone net of the Humboldt-Universität zu Berlin is based on 10-Gigabit-Ethernet technology (see Jahresbericht des CMS 2016, S. 18: http://edoc.hu-berlin.de/series/cms-in-zahlen/2015-3/PDF/3.pdf).

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

17. Comments/feedback

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

0. N/A: Not Applicable.

Self-assessment statement:

Guidance is made clearer, criteria for entry level has been improved. Focus on infrastructure and security gives the data producer the assurance that their data and materials will be stored in a reliable manner and can be reused.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments: