



Assessment Information

[CoreTrustSeal Requirements 2020–2024](#)

Repository: Regionaal Archief Zutphen (part of Gemeente Zutphen)
Website: <https://erfgoedcentrumzutphen.nl/>
Certification period: Oct. 1, 2024 - 01 October 2027
Requirements version: CoreTrustSeal Requirements 2023-2025

This repository is owned by: **Gemeente Zutphen**

CORE TRUSTWORTHY DATA REPOSITORIES REQUIREMENTS

Background Information

Re3data Identifier

Please fill you Re3data identifier from the website: <https://www.re3data.org/>

Response:

<https://www.re3data.org/repository/r3d100013336>

Reviews

Reviewer 1:

Comments:

Reviewer 2:

Comments:

Repository type

Please select your repository type.

Response:

- Generalist repository

Reviews

Reviewer 1:

Comments:

Reviewer 2:

Comments:

Overview

Provide a short overview of key characteristics of the repository, reflecting the repository type selected. This should include information about the scope and size of data collections, data types and formats. Further contextual information may also be added.

Response:

According to the Dutch Public Records Act 1995 (Archiefwet 1995; <https://wetten.overheid.nl/BWBR0007376/2018-07-28>), the statutory task of the Regionaal Archief Zutphen (Regional Archives of Zutphen, hereafter referred to as RAZ) is to function as a place of deposit for decentralised, local government organisations such as municipalities, communal schemes and water authorities. The RAZ also manages private archives and archives of organisations, institutes and people in the region.

The RAZ is one of the partners of the Heritage Centre Zutphen; the other partners are Archaeology, Museums and Monuments. Its operational region consists of the municipalities of Zutphen, Brummen and Lochem. The RAZ is an operational team of the municipality of Zutphen. Services for Brummen and Lochem are provided on the basis of service contracts (SCs).

Reviews

Reviewer 1:

Comments:

Reviewer 2:

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Comments:

Designated Community

A clear definition of the Designated Community demonstrates that the applicant understands the scope, knowledge base, and methodologies—including preferred software/formats—of the group(s) of users at whom the curation and preservation measures are primarily targeted. The definition should be specific so that reviewers can assess whether that community is being served in the responses to other requirements.

Response:

The RAZ distinguishes between two Designated Communities:

- the producers of digital archives - local government bodies or private individuals, who are both providers and consumers;
- the public in the broadest sense of the word, who are consumers.

These groups can be distinguished on the following basis:

Producers:

The RAZ derives its reason for existence largely from the Public Records Act. 'Depositors' (refer to article 1.d. of the Public Records Act for an explanation of this term) are obliged to transfer their public records to a place of deposit after 20 years on the basis of article 12, clause 1 of this Act. The RAZ was appointed by the depositors of Zutphen, Brummen and Lochem as the place of deposit for their public records. As indicated in R0, the RAZ also manages private archives and archives of organisations, institutes and people in the region. After transfer to the place of deposit, the records are made public (as stipulated by Public Records Act article 14). This changes the producer's status from provider to consumer.

Public:

As public records that have been transferred to a place of deposit are open to everyone, it is impossible to ascertain in advance who will consult them in the future. The producer (provider) of the records may be a future consumer, but future consumers could just as easily be 'the general public', such as journalists and researchers. It depends entirely on future interest in the contents of the documents. 'The public' is therefore our second designated community.

In its capacity as an archive service, the RAZ's statutory task does not imply that its employees are subject matter experts for all its collections. The RAZ therefore has limited domain expertise of its user groups at its disposal. The records are managed and made accessible in accordance with laws and regulations and applicable standards. To ensure that the public is able to understand the contextual information of the collections, the RAZ's website contains a 'Help with your research' page: <https://erfgoedcentrumzutphen.nl/help>. This information enables everyone to conduct research in the collections of the RAZ.

Both designated communities – producers and consumers – have the same level of access to the collections. This is due to the Public Records Act.

The RAZ's policy points of departure concerning designated communities are included in chapter 2.2 of the Atorage and management strategy. This document can be consulted via https://erfgoedcentrumzutphen.nl/images/Archief/e-depot/2023/Bewaar_en_beheerstrategie_e-depot_RAZ_12.pdf

A specification as described above is included in the Preservation plan, chapter 4.3. This can be consulted via

https://erfgoedcentrumzutphen.nl/images/Archief/e-depot/2023/Preserveringsplan_e-depot_RAZ_12.pdf

Reviews

Reviewer 1:

Comments:

A very detailed description of the designated communities!

Reviewer 2:

Comments:

Levels of Curation

Please fill you level(s) of curation.

Response:

- B. Basic curation – e.g. brief checking, addition of basic metadata or documentation
- C. Enhanced curation – e.g. conversion to new formats during ingest, enhancement of documentation and metadata

Reviews

Reviewer 1:

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Comments:

Reviewer 2:

Comments:

Levels of Curation - explanation

Please add the description for your Level(s) of Curation.

Response:

For all analogue and digital archives it manages, the RAZ adds basic metadata and documentation in the form of an inventory (catalogue). This contains a description of the archive and its contents, its history and the history of its producer, and any restrictions related to access. For the digital public records that are preserved in the 'e-depot' repository, enhanced curation is performed. All files in this repository are normalized for preservation, metadata are automatically checked against a schema and file formats are identified using PRONOM.

Reviews

Reviewer 1:

Comments:

Reviewer 2:

Comments:

Cooperation and outsourcing to third parties, partners and host organisations

Please describe any cooperation and outsourcing to third parties, partners and host organisations.

Response:

The RAZ has two outsource partners concerning the repository; Vitec Memorix and MvBWorks.

Vitec Memorix was known as Picturae Holding B.V. until October 2023, when the company was acquired by Vitec. Apart from the company's new ownership and name, nothing has changed. All contracts and other agreements signed with Picturae prior to the acquisition are still valid. Vitec Memorix supplies the software, storage, and hosting of the repository. The RAZ and Vitec Memorix have cooperated on tasks including the construction of the Erfgoedportaal (heritage portal) and the Memorix Maior and Memorix Archieven collection management systems since 2005. Artefactual, the supplier of the Archivemata digital preservation software is not an outsourcing partner of the RAZ. Vitec Memorix delivers the software as a service and is in direct contact with Artefactual. The RAZ does not deal directly with Artefactual.

Together with several other Dutch regional archives, the RAZ has commissioned MvBWorks to build the 'Topx Creator' tool which is used as a pre-ingest application for the repository. The tool has been built for use with the Dutch governmental metadata standard TMLO (Toepassingsprofiel Metadatering Lokale Overheden), but can be adjusted to fit different standards like the upcoming MDTO (Metagegevens Duurzaam Toegankelijke Overheidsinformatie) by MvBWorks. The tool has been specifically created to allow Dutch local government archives and their TMLO metadata to be ingested in an Archivemata repository. The RAZ recommends that its depositors use this tool to check and add metadata in order to ensure a correct ingest of the metadata. Using the ToPX creator, local government depositors can create a TopX XML file. Together with the archive objects themselves, these files form the SIP, which will be ingested in the repository.

The SLA (including the 'Additional agreements regarding Archivemata') with Vitec can be consulted via https://erfgoedcentrumzutphen.nl/images/Archief/e-depot/2023/SLA_Picturae_2023.pdf and https://erfgoedcentrumzutphen.nl/images/Archief/e-depot/2023/Aanvullende_afspraken_Picturae_2023.pdf

Reviews

Reviewer 1:

Comments:

Reviewer 2:

Comments:

Applicants renewing their CoreTrustSeal certification: summary of significant changes since last application.

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Please fill this field when you are renewing your CoreTrustSeal Certification.

This field can be marked with not applicable (N.A.) if you are acquiring a CoreTrustSeal certificate for the first time.

Response:

R7, R10 and R14 have been updated to reflect the current status more accurately. The policies, plans and other documents that provide supporting evidence have been updated. The responses have been made more concise and tailored to fit the 2023-2025 requirements, and the entire application has been reviewed linguistically.

Reviews

Reviewer 1:

Comments:

Reviewer 2:

Comments:

Organisational Infrastructure

R1 Mission & Scope (R01)

R01. The repository has an explicit mission to provide access to and preserve digital objects.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

As stated in the long-term policy plan RAZ 2021-2024, "[t]he mission of the RAZ is to include, manage and provide access to and make available digital objects (regardless of form) of the participating governmental bodies, as well as private archives of citizens and businesses. These tasks will not be altered by the planned update of the Public Records Act in 2023.

In addition, the RAZ and involved municipal heritage disciplines are jointly building the knowledge centre on the history of Zutphen.

Typifying characteristics of the Regionaal Archief Zutphen are accessibility, expertise and client focus."

The explicit mission is based on the Public Records Act 1995 and concerns archive objects regardless of form. Access to and preservation of digital archive documents is delivered with the same level of care and quality as for analogue archives and records. Chapter 2b of the policy plan examines the accessibility of digital archives in more detail. Chapter 3b studies making digital archives available in more depth. The repository has been implemented on the basis of the following definition of digital archive or e-depot (translated from ED3): "An e-depot is the entirety of organisation, policy, processes and procedures, financial management, personnel, data management, data security and on-site hardware and software that facilitate the long-term management and consultation of digital archive objects to be stored."

The long-term policy plan was formally approved by the executive council of the municipality of Zutphen in the meeting of 5 July 2022.

Links:

- [Long-term policy plan](#)
- [ED3](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R2 Rights Management (R02)

R02. The repository maintains all applicable rights and monitors compliance.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

Archive objects (regardless of form) under the stewardship of the RAZ are open to the public and can be consulted unconditionally on the grounds of the Public Records Act. This means that there are no licences or admission criteria. However, Articles 15, 16 and 17 of the Public Records Act enable depositors, as the owners of the archive objects before and after transfer to the place of deposit, to impose publication restrictions on archive objects for a specific period of time. Public Records Act article 15 specifies the following grounds for this:

- Respect for personal living conditions/quality of life;
- The interests of the State or its allies;
- Disproportionate advantage or disadvantage.

In practice, this is done as follows: Connection Plan chapter 2.3.A.5, which concerns publication and access, states that depositors of public records must specify which records they wish to exclude from the public domain in accordance with articles 15, 16 and 17 of the Public Records Act. These particular records need to be listed in the Transfer Declaration (see Connection Plan chapter 2.3.E.1) in accordance with articles 9 and 10 of the Archive Decree (Archiefbesluit 1995, <https://wetten.overheid.nl/BWBR0007748/2013-01-01>). The transfer declaration states that the affected records can only be consulted after written permission from the Mayor and Councillors of the municipality (producer/depositor) that transferred the archive to the RAZ. In addition, the depositor is responsible for recording publication restrictions in the metadata of each archive object (Connection Plan chapter 2.3.C.2).

The standards and requirements relating to metadata are described in R8.

After the public records have been officially transferred to the repository, the RAZ shows which records have been excluded from the public domain in the access information on its website. Access restrictions are presented at two levels:

1. At archive level: An example of a non-public archive is provided here:

<https://erfgoedcentrumzutphen.nl/onderzoeken/archieven/details/NL-ZuRAZ-0500/keywords/burgemeester/witthscans/0/start/0/limit/10/flimit/5>. It is stated under the header 'Voorwaarden voor raadpleging en gebruik' ('Conditions for consultation and use') that if someone wishes to consult this particular archive, an appropriate written request must be addressed to the executive council of the depositor. This then decides whether the data may be accessed.

2. At individual record level: An example of a non-public record is provided here:

<https://erfgoedcentrumzutphen.nl/onderzoeken/archieven/file/0b5163fe2ae442489e208278c4d39a23>. In this case, the request module (used by staff to provide access to digital material requested by members of the public) ensures that this specific record cannot be provided to the applicant. Every 2 January, the Archivist automatically checks whether the restriction can be lifted. If someone wishes to nevertheless consult this particular record prior to the date of publication, an appropriate written request must be addressed to the executive council of the depositor. This then decides whether the data may be accessed.

It is possible for depositors of private archives to request publication restrictions – if applicable, these restrictions are included in the 'donation agreement' (schenkingsovereenkomst). However, the RAZ's mission is strongly geared towards making archives accessible and available to the public because the RAZ aims to be a centre of knowledge on the history of Zutphen for our designated community. For this reason, there is limited compliance in terms of publication restrictions on private archives.

Conditions of use:

- In the picture gallery (Beeldbank) on our website, it is not possible to download material that is subject to author's rights. There is even a 'Downloadable' filter (yes/no) in place. As mentioned in the policy plan, the RAZ aims to implement a license system (most likely Creative Commons) for visual material by 2024.

- By default, users who request and receive access to digitized building permits are informed that:

- o They will only receive material that does not contain any of the special categories of personal data as specified in the GDPR;
- o Any plans, drawings or photographs in the material may be subject to copyrights and are for private use only;
- o Private use of building plans does explicitly not include using them for rebuilding/imitation purposes.

The RAZ actively monitors compliance upon receipt of the material. Non-compliance is handled on a case-by-case basis, and in the case of public records, complaints are forwarded to the depositor, who remains the owner of the information and is therefore responsible for any publication restrictions.

Links:

- [Long-term policy plan](#)
- [Connection plan](#)

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R3 Continuity of Service (R03)

R03. The Repository has a plan to ensure ongoing access to and preservation of its data and metadata.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

Firstly, the continued operation (i.e. storage, preservation and dissemination of digital archive objects) of the RAZ repository is guaranteed due to its nature as a place of deposit for local government bodies.

Nevertheless, a range of threats can obstruct the continuous operation of the repository. To map out these threats and to implement appropriate measures, the RAZ has created a Continuity Plan. The objective of this plan is to provide an overview of the arrangements that are needed to safeguard the digital archive objects in the repository against threats. The Continuity Plan describes how and where the measures to be implemented must be laid down, who is responsible for each measure and who implements the mitigations. The Continuity Plan is reviewed and updated regularly.

The following measures to mitigate risks designated as 'high' in the Continuity Plan have been implemented:

- The RAZ is registered as a beneficiary of the Picturae Escrow Arrangement. If Picturae is no longer able to guarantee its continuity as an organisation, the source codes and documentation of the application curated by the escrow agent will be provided to the end user (the RAZ).
- The Service Level Agreement (SLA) with Picturae contains agreements on performance, processes and procedures for aspects such as back-up & restore, fixity controls, exit strategy, service provision and hosting.
- Organisational and financial continuity of the RAZ is guaranteed because the RAZ is part of the government organisation of the municipality of Zutphen as well as the designated place of deposit for the municipal archives. The RAZ is also designated as the place of deposit for the municipalities of Brummen and Lochem on the basis of their archive regulations. However, the service contracts with Lochem and Brummen are not of decisive importance for the continuity of the repository.

Theoretically, the municipality of Zutphen may transfer its records to another place of deposit (e.g. to a joint arrangement ['gemeenschappelijke regeling']). However, the responsibility for the stewardship of the archives of the municipality of Zutphen can never be transferred to a different organisation. The 'Archiefverordening gemeente Zutphen 2016' (Archive regulation of the municipality of Zutphen 2016) stipulates that the city council is responsible for the stewardship of the archives of the municipality of Zutphen. Even if continuity problems at the RAZ result in the archive tasks having to be executed elsewhere, the municipality of Zutphen always retains stewardship and therefore responsibility. This is can not be transferred to another (government) organisation. The only exception is if the municipality of Zutphen itself ceases to exist (for example, if it merges with another municipality); in that case, the responsibility for the Zutphen archives will be transferred to the new government body of which Zutphen has become a part.

Links:

- [Continuity Plan](#)
- [Archive regulation of the municipality of Zutphen 2016 \(Dutch only\)](#)
- [Service Level Agreement](#)
- [Additional agreements regarding Archivematica](#)

Reviews

Reviewer 1:

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Thanks for the added information. Accepted.

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R4 Legal & Ethical (R04)

R04. The repository ensures to the extent possible that data and metadata are created, curated, preserved, accessed and used in compliance with legal and ethical norms.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

As stated in R2, the RAZ and its depositors (i.e. local government bodies) are held to comply with the Public Records Act and its affiliated decrees and regulations, which include stipulations regarding the 'proper, ordered and accessible condition' of the archive objects. In addition, the RAZ needs to comply with copyright and intellectual property laws and the GDPR. The municipality of Zutphen, of which the RAZ is part, and Vitec Memorix, supplier of the repository software, have signed a processor's contract in which Vitec Memorix (still called Picturae at the time the contract was signed) demonstrates compliance with the GDPR regarding processing and protection of personal data stored in the repository. The RAZ actively follows projected changes and updates to laws, regulations and standards. There are no specific discipline or domain standards for the local government administration archives kept by the RAZ.

Digital objects with disclosure risk are excluded from public accessibility in accordance with article 15 of the Public Records Act and the GDPR. This is done mainly by means of the national TMLO metadata standard, which requires compulsory metadata on confidentiality and publicity (elements 17 and 18 in TMLO). The depositors are responsible for creating data and metadata in accordance with legal and ethical norms. The RAZ requires that depositors prepare their depositions using the Connection Plan, which contains a chapter on publicity and access referencing the stipulations of the GDPR. All RAZ staff who manage or provide access to archived digital records are familiar with the restrictions regarding publicity and confidentiality prescribed in the Public Records Act and the GDPR. When the GDPR was first introduced, all RAZ staff have been trained. As stated in R2, digital objects that have been excluded from the public domain cannot be accessed without explicit written permission from the Mayor and Councillors of the municipality (depositor) that transferred the archive to the RAZ. Requests to consult such objects are addressed to the keeper of the records (Dutch 'archivaris'), who is required by law to hold a degree in archival sciences.

Links:

- [Connection plan](#)
- [Processor's contract](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Thank you for the clarification. Accepted.

Thanks for the update. I would still like to see *how* you ensure that RAZ staff are familiar with relevant parts of PRA & GDRP. Is training provided?

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Is there any Is there any staff training for managing digital objects with disclosure risk?

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R5 Governance & Resources (R05)

R05. The repository has adequate funding and sufficient numbers of staff managed through a clear system of governance to effectively carry out the mission.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

The continuity of financial resources to maintain the repository is guaranteed due to the RAZ's statutory task. The required financial resources are included in the long-term budget of the municipality of Zutphen (see Preservation plan, chapter 3.2). A budget cycle typically covers 4 years. In the municipal budget, the municipality of Zutphen annually includes a structural item with sufficient resources for maintenance and further development of the digital repository. This includes staff salaries, IT resources and staff training. In principle, this annual item is ongoing, unless changes occur that affect the sum, for example when a depositor joins or leaves or if contracts are signed with a different supplier. In that case, the budget will be reviewed. The municipal executive council must always ensure that sufficient financial resources are available to guarantee the stewardship of the archive on the basis of the statutory task. In addition, the municipalities of Brummen and Lochem pay annual fees for the services delivered by the RAZ, as laid down in the service contracts. These contribute to but are not essential for the continuity of the repository.

As stipulated by the Public Records Act, the municipalities of Zutphen, Lochem and Brummen have appointed the RAZ's archivist as their municipal archivist. The municipal archivist manages all archives that have been transferred to the place of deposit, and is required to have an archival science degree. The municipal archivist is accountable to the executive councils of the three municipalities. The RAZ is an operational team of the municipality of Zutphen, serving fellow civil servants and the public alike. All staff members who are involved in running and developing the repository and its affiliated policies, strategies and projects have permanent contracts. The formation and roles of the RAZ team are described in more detail in the Long-term policy plan and the Preservation Plan.

Links:

- [Long-term policy plan](#)
- [Service Contract Brummen](#)
- [Service Contract Lochem](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R6 Expertise & Guidance (R06)

Regionaal Archief Zutphen (part of Gemeente Zutphen)

R06. The repository adopts mechanisms to secure ongoing expertise, guidance and feedback-either in-house, or external.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

The descriptions of the roles, tasks and skills that are needed to manage and further develop the repository are included in chapter 5.7 of the Preservation Plan. As regards the depth of expertise, organisation and personnel, the RAZ is sufficiently equipped to manage a digital repository and therefore to execute its mission. RAZ staff are qualified for their jobs and are assigned annual training budgets. However, as a relatively small archive service, the RAZ does not develop its own products or take a leading role in developing digital repository standards or sustainability policies. The RAZ follows the Nationaal Archief (National Archives) and outsources tasks such as software development, storage and hosting to experts in this field on the basis of SLAs and contracts.

The Dutch archives sector is rich in national and international expertise groups that share knowledge, draw up standards and provide advice. The RAZ participates in a number of these expertise groups in order to acquire and share knowledge.

The 'Adviseurs Digitale Informatie' (ADI) (digital data advisors) working group consists of a network of experts that meet regularly to share knowledge in the field of digital archives (e-depots). Examples of topics that are discussed are certain types of data objects, technical issues and functional standards. The working group communicates on the KIA knowledge platform <https://kia.pleio.nl> (closed environment).

The Nationaal Archief (NA) is a pioneer in this field. It provides expertise that regional and local archives can apply within their organisations; for example, metadata models and exchange standards. The knowledge products created by the NA are publicly available and are frequently implemented as standards by many repositories in the country.

The Heritage Centre Zutphen (in which the RAZ is a partner) participates in the Dutch Digital Heritage Network (Netwerk Digitaal Erfgoed (NDE) - <https://www.netwerkdigitaalerfgoed.nl/en/>). The mission of this network is to develop a system of facilities and services for improving the visibility, usability and sustainability of digital heritage in the Netherlands.

Furthermore, the RAZ participates in the 'Archivemata e-depot users' working group, which consists of Dutch Archivemata customers, to share knowledge and expertise. The group members provide mutual support in terms of content, and request Archivemata developments based on their needs and wants.

Expertise on the Archivemata management environment can be found in a national community and an international community (<https://groups.google.com/forum/#!forum/archivemata> and <https://github.com/artefactual/archivemata>). Users can request support and feedback via these platforms. Documentation of the software can be consulted on the Archivemata website <https://www.archivemata.org/en/>. Vitec Memorix has a wiki on the specific set-up of Archivemata for users at <https://wiki-archives.memorix.nl/> (not freely accessible).

The RAZ can call on the assistance of the municipality of Zutphen for expertise in the fields of purchasing, law, privacy, data security, i-advises (i-consulting) and management.

These channels give the RAZ access to leading and objective organisations that possess helpful expertise.

Links:

- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Digital Object Management

R7 Provenance and authenticity (R07)

Regionaal Archief Zutphen (part of Gemeente Zutphen)

R07. The repository guarantees the authenticity of the digital objects and provides provenance information.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

Before transfer of the digital archive objects to the repository, the RAZ and the depositor draw up a connection plan based on the Transfer Protocol. This contains information about the archive objects to be transferred, including:

- A description of the data objects to be transferred (title, organisation, creator, period in which the material was created, etc.).
- The structure of the archive – structured data objects with linked metadata.
- Significant properties.
- The software application in which the data objects are currently stored.
- The manner in which the contents of the application are exported.
- Information on possible migration, destruction or compression of data objects in the archive.
- An overview of the metadata (added manually as well as assigned automatically).
- The presence of encrypted files.
- The presence of digital signatures.
- Checking the data objects for viruses.
- The size of the data objects in Megabytes, Gigabytes or Terabytes.
- The file formats present.
- Publication restrictions (if applicable).
- Copyrights (if applicable).
- The manner in which the data objects are packaged (sample SIP).
- The manner in which the archive is transferred via a secure connection, such as HTTPS.

The metadata contains not only provenance information and technical details, but also the management activities until the moment of transfer. Various checks are performed during ingest, including which file formats are present and whether the metadata is complete, correct and valid. If errors occur, the data set will be returned to the depositor for correction. Please note that depositors (i.e. the municipalities) do not deposit any archive material into the repository themselves; all ingest and management activities are performed by authorised RAZ staff. The identity of the depositors is included in the metadata; the identity of the RAZ staff members who perform the ingest and management activities is checked and confirmed at login stage. The complete ingest process is recorded in the METS metadata file. This guarantees the authenticity of the digital files on ingest.

In principle, data objects are stored unchanged. The RAZ complies with the preferred file formats policy of the NA (see Storage and Management Strategy). Data objects can only be changed if file formats deviate from the preferred and acceptable formats prescribed by the NA. In such cases, a migration scheme is a possible approach, retaining the original file as supplied by the depositor. At present, the repository only contains public records in preferred file formats and the RAZ does not expect to have to implement migrations shortly. However, migration is one of the preservation strategies at the RAZ, and it may need to be implemented once file formats that deviate from the NA's file format policy are ingested and stored. Other change strategies, such as emulation, are not, as yet, part of the (technical) options of the repository (see Preservation Plan chapter 5).

The management activities in the archival storage are also recorded in the METS metadata (see Preservation Plan chapter 5.5.).

Since the material that is transferred to the repository is static (i.e. final and unchangeable), active versioning does not occur. As stated in the Connection Plan, depositors only transfer definitive versions of digital documents which are the result of finished processes and which are to be preserved permanently. If at a later stage, another version of a document needs to be added to the repository, a new SIP will be created which has its own unique identifier and metadata. A reference to the previous version will be included in the new SIP's metadata.

Links:

- [Storage and Management Strategy](#)
- [Transfer Protocol](#)
- [Connection plan](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R8 Deposit & Appraisal (R08)

R08. The repository accepts data and metadata based on defined criteria to ensure relevance and understandability for users.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

The Public Records Act stipulates that government bodies are obliged to preserve public records of more than 20 years old by transferring them to an assigned place of deposit. The RAZ is the place of deposit for a number of government organisations in the region and therefore receives these organisations' archives that are eligible for permanent preservation. Upon completion of the transfer, a transfer declaration is signed by the RAZ and the depositor, after which the RAZ has custody of the deposited material. The depositor remains the owner of the material. Private archives are not subject to the Public Records Act. The RAZ's policy regarding the acquisition of private archives is described in the Long-term policy plan 2021-2024. When it comes to curation and preservation, the RAZ does not distinguish between government archives and private archives. All items stored in the 'e-depot' repository are subject to enhanced curation.

The repository uses an ingest process (described as SIP in OAIS) centred on quality controls to guarantee the completeness and comprehensibility of the data and metadata. This ingest process is described in the Preservation Plan, chapter 5.6.2. It is fully based on OAIS and uses micro-services which, among other things, check whether all files described in the metadata are present and whether the metadata is complete, and subsequently validate the files against the metadata schema. It is only possible to generate and store an AIP when the process has been executed without any errors. The results are recorded in the METS metadata file which is stored with the AIP.

The Storage and Management Strategy stipulates that metadata supplied by a provider must be TMLO compliant. TMLO is the Dutch metadata standard for local government bodies and includes requirements for metadata for the purpose of long-term preservation. If it becomes apparent during the ingest process that not all compulsory (preservation) metadata is available, the system will automatically halt the ingest. A report detailing the errors will be produced. The depositor will have to fix any errors before supplying the data and metadata again.

To facilitate the creation of correctly formed archive packages, the RAZ makes a custom pre-ingest tool called ToPX Creator available to the depositors. This enables them to create a SIP that complies with all requirements regarding completeness and metadata. The operation of this tool is described in chapter 5.1 of the Transfer Protocol. The tool is not publicly available online and can only be used in the depositor's secure IT environment. Functionalities of the tool include conversion of metadata into ToPX format, checking the completeness of data in relation to the metadata, generation of technical metadata such as hash code (sha256), file format (PRONOM) and file size. In principle, SIPs that have been generated using the TOPX Creator will be ingested successfully in the repository.

As stated in R7 and in the storage and management strategy, the RAZ conforms to the preferred file formats strategy of the Nationaal Archief. Depositors are informed of this and need to comply. During the ingest process a quality check is performed (identify file formats, see Preservation Plan chapter 5.6.2) to ascertain whether the deposited material complies with the preferred formats. It is possible to normalize data objects that are not in any of the preferred or acceptable file formats for preservation; any such cases are examined on an individual basis. The expertise groups (see R6) can be asked for advice in these cases.

Links:

- [TMLO XML scheme](#)
- [Long-term policy plan](#)
- [Storage and Management Strategy](#)
- [Transfer Protocol](#)
- [PRONOM Database](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R9 Preservation plan (R09)

R09. The repository assumes responsibility for long-term preservation and manages this function in a planned and documented way.

Compliance level:

In Progress: the repository is in the implementation phase - 0

Response:

As stated above, all digital objects stored in the 'e-depot' repository need to be kept and preserved for ever. As the legal custodian of the digital objects in the repository, the RAZ is responsible for this. The level of responsibility is the same for all objects stored in the repository. As part of the ingest process, all SIPs are normalized for preservation. This means that they are transformed to a standard open file format, such as PDF or TIFF, for preservation purposes. As stated in the Archivematica user manual, "Normalization is Archivematica's primary format preservation strategy. The preservation copies are added to the AIP and the access copies are used to generate a DIP for upload to the access system. Note that the original files are always kept, to allow for different preservation actions in the future, such as normalization to different archival formats or emulation."

Using PRONOM and the Dutch National Archives' preferred formats list, the RAZ can identify current and outdated file formats. The repository is able to convert files in bulk, which allows the RAZ to convert files in time to a more common file format. When planning preservation actions, the RAZ will always choose the method which best preserves the AIP's significant properties (content, context, structure, form and behaviour).

Since the RAZ's statutory task is to keep and preserve archive objects forever, objects are not removed or deleted from the repository. The only reasons to do this would be the termination of one of the service contracts, in which case the digital objects are returned to the depositor/owner, or the RAZ's decision to end the contract with Vitec Memorix in favour of another storage and hosting supplier, in which case the entire content of the repository needs to be moved to another 'e-depot' facility.

Processes and procedures related to preservation and management of the digital objects are documented in:

- The Storage and Management Strategy,
- The Preservation Plan,
- The SLA with Vitec Memorix, including the additional agreements.

Vitec Memorix utilises a management system that complies with the requirements of standard NEN-ISO 27001:2017 applicable to the long-term storage of digital heritage content.

Links:

- [Storage and Management Strategy](#)
- [Archivematica user manual](#)
- [Service Level Agreement](#)
- [Additional agreements regarding Archivematica](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

In Progress: the repository is in the implementation phase - 0

Comments:

Reviewer 2:

Compliance level:

Regionaal Archief Zutphen (part of Gemeente Zutphen)

In Progress: the repository is in the implementation phase - 0

Comments:

R10 Quality Assurance (R10)

R10. The repository addresses technical quality and standards compliance, and ensures that sufficient information is available for end users to make quality-related evaluations.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

Quality requirements for digital public records are mostly laid down in the Public Records Act and related regulations.

Article 3 of the Public Records Act stipulates that government bodies are obliged to ensure that the public records entrusted to them are and remain in good, orderly and accessible condition. The RAZ's approach to data and metadata quality is derived primarily from these requirements.

According to Article 17 of the Archive Regulation, it should be possible to establish the following aspects of every archive document at any time:

- a. the content, structure and form at the time the document was received or created by the government body, as far as these aspects had to be knowable for the execution of the work process in question,
- b. when, by whom and on the basis of which task or work process it was received or created by the government body,
- c. the connection with other archive documents received and created by the government body,
- d. the management activities executed in relation to the archive documents, and
- e. the software or application used to store or manage the archive documents.

Article 19 clause 2 of the Archive Regulation stipulates that the depositor assigns metadata to the public records which makes it possible to discover the aspects referred to in Article 17 at all times. Articles 21 to 26 specifically discuss special regulations for digital public records that need to be preserved permanently. The RAZ only accepts public records that are to be preserved permanently (see R8). The quality of the metadata and data therefore depends on the degree to which depositors comply with the requirements of the Public Records Act and Archive Regulation.

Checking the quality of data and metadata is largely secured in automated processes, as described in chapter 5 of the Preservation Plan. Metadata is checked/validated against a schema on ingest. This diagram is the XML translation of the TMLO application profile, which is based on metadata requirements in the Archive Regulation. The completeness, integrity and authenticity of the data (see also R7 & R14) is checked during ingest.

Prior to ingest – before the transfer – the provider contacts the RAZ to prepare for the transfer and storage of the digital objects. This is detailed in the Transfer Protocol. The Transfer Protocol also lists the structure, metadata, naming and file format requirements for transfers, and what will be done if any of these cannot be met. The archivist evaluates the data and metadata jointly with the e-curator. The ingest process is executed by the e-curator. If it is apparent that the deposited material fails to meet the quality requirements of the Public Records Act and Archive Regulation, the ingest is rejected and the depositor must first ensure compliance before another ingest can be considered. If needed, RAZ staff can support the depositor.

Links:

- [Transfer Protocol](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R11 Workflows (R11)

Regionaal Archief Zutphen (part of Gemeente Zutphen)

R11. Digital object management takes place according to defined workflows from deposit to access.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

The work processes from ingest to dissemination are described in the Preservation Plan. The work processes in the repository are fully based on OAIS and, naturally, apply the requirements of the Public Records Act and Archive Regulation. This is all in order to enable the RAZ to perform its mission.

The Preservation Plan includes descriptions of staff functions and responsibilities. Specific work processes such as ingest or preservation activities can only be executed by authorised staff, prompted by the repository's micro-services. All processes and activities that are executed in the repository are recorded and stored in METS metadata files.

As stated before, all objects in the 'e-depot' repository are subject to one and the same curation level, and are stored and preserved in compliance with the same legal requirements. The workflows and work processes are therefore suitable to all types of data in the repository. If there are any changes to either the legal framework or the type of archive objects, the workflows and the Preservation plan will be updated as necessary.

Links:

- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R12 Discovery and Identification (R12)

R12. The repository enables users to discover the digital objects and refer to them in a persistent way through proper citation.

Compliance level:

In Progress: the repository is in the implementation phase - 0

Response:

In compliance with the OAIS model, on ingest a DIP of the digital data is created for dissemination purposes. The DIP can be accessed via the Memorix Archieven collection management system and is made available on the heritage portal in the archive inventories:

<https://erfgoedcentrumzutphen.nl/onderzoeken/archieven/>. The inventory is presented in HTML and can be viewed and downloaded in PDF and XML.

Memorix Archieven is built on archive standards such as:

ISAD(G): General International Standard Archival Description

ISAAR (CPF): International Standard Archival Authority Record for Corporate Bodies, Persons and Families

ISDIAH: International Standard for Describing Institutions with Archival Holdings

The archive inventories have been built using an EAD structure.

Using these internationally accepted standards enables humans and machines to search and exchange the archive inventories. The heritage portal provides search aids for the collections, including the archive inventories, via

<https://erfgoedcentrumzutphen.nl/hulp-bij-onderzoek/2-deelnemerinformatie/108-collectie-archieven>.

The repository provides options for automated harvesting of metadata. Metadata and the DIP can be harvested via OAI-PMH. This open standard is used by websites such as Archives Portal Europe to harvest data from the RAZ.

In chapter 6.3 of the Preservation Plan, 'Picture 4: Architecture picture e-depot' illustrates how the information flow from ingest to dissemination and

Regionaal Archief Zutphen (part of Gemeente Zutphen)

harvesting is controlled.

Every record in the archive inventories on the heritage portal includes a quotation instruction. The English translation of this instruction is as follows:

“When quoting in annotation and accountability the archive must be mentioned at least once, in full and without any abbreviations. An abbreviated reference will suffice thereafter.”

An example of a complete quote:

“Regional Archive Zutphen, Inventory of the archive of the Department for Social Affairs of the municipality of Zutphen (1919-1964), access number 0282, inventory number 1”

An example of an abbreviated quote:

“NL-ZuRAZ, Department Social Affairs municipality of Zutphen, 0282, inv.no. 1”

See example: <https://erfgoedcentrumzutphen.nl/onderzoeken/archieven/file/d84a333558363c95bf030193b1836cd9>; open the record to view the quotation instruction.

Currently, Permalinks is used to work with individual records. This link refers to the ID of the record in the database containing the information.

Consequently, the link will continue to exist when changes are made in the website. For example:

<https://erfgoedcentrumzutphen.nl/onderzoeken/archieven/file/1a2a5ab8dad23d6484d67070005b75b3>; open the record to view the Permalink.

The provision of persistent identifiers for records in our archive inventories is in the implementation phase. The first phase of implementation was building the functionality into the Archivemata system. This was achieved thanks to the efforts of and financing from the Internationaal Instituut voor Sociale Geschiedenis (IISG). The functionality is now available for every Archivemata user. A micro-service named ‘BindPIDs’ is executed during the ingest of digital archives (see Preservation plan chapter 5.6.2). This service ensures that persistent identifiers are assigned to a record and the information is sent to a Handle Server (see: <https://www.archivemata.org/en/docs/archivemata-1.7/user-manual/administer/dashboard-admin/> heading ‘Bind PIDs’). The latter must be configured on the basis of a subscription to the PID service. The intention is to achieve this in the near future in cooperation with Picturae in order to complete the implementation. In the meantime, RAZ uses Universally Unique Identifiers. UUIDs can be used for reliably identifying persistent objects across a network. In Archivemata UUIDs are added to the Archival Information Package (AIP) and are unique for every AIP.

The RAZ currently provides persistent identifiers for its genealogical collections. This is done using the Handle System via SurfSara. For example:

<https://hdl.handle.net/21.12104/ade7e2f8-0e85-11e0-bd00-21973653728c>

Information on the open data policy is included under <https://erfgoedcentrumzutphen.nl/deelnemers/erfgoedcentrum/wat-wij-doen> heading ‘Open Data’. At the present time, the genealogical data sets (18 sets; 17 in XML format and 1 in OAI-PMH format) are published on <https://opendata.picturae.com/>. These sets are reused by websites including WieWasWie, Open Archieven, Collectie Gelderland and Europeana.

In addition, the RAZ’s data can be harvested using APIs. Example: the oorlogsbronnen.nl website harvests images taken during World War II from the RAZ’s images collection based on date range or keywords.

Links:

- [UUIDs in Archivemata](#)
- [Information about UUIDs](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

In Progress: the repository is in the implementation phase - 0

Comments:

Reviewer 2:

Compliance level:

In Progress: the repository is in the implementation phase - 0

Comments:

R13 Reuse (R13)

R13. The repository enables reuse of the digital objects over time, ensuring that appropriate information is available to support understanding and use.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Response:

When a digital archive is supplied by a provider, the metadata need to comply with the TMLO standard and should be supplied in ToPX XML format. TMLO is a standard established by the NA and used by local government bodies throughout the Netherlands to enable standardisation, exchange options and long-term storage.

In addition, to make use and reuse of the archived data easier, the RAZ follows the preferred and acceptable formats policy of the Nationaal Archief. This means that digital archive objects are stored and made accessible in open standard formats that can be viewed online or using commonly available software. If a depositor wants to transfer formats that deviate from the preferred or acceptable formats, appropriate measures are assessed on a case-by-case basis (as stated in the Preservation Plan).

Any changes in formats are entered in the PRONOM database and in the NA's preferred formats policy. Preservation in the repository is set up to handle required changes in format (see Preservation Plan chapter 5). If necessary, a re-ingest is performed to migrate the file formats while retaining the original content as well.

There are no plans for a future migration at the time of recertification. The RAZ does not expect to implement this in the next few years. However, migration is part of our strategy and can be carried out if necessary.

Furthermore, for each AIP, there is a METS metadata file which contains details regarding the administrative actions performed on the AIP. Every AIP in Archivematica also contains a README file describing the content of the AIP, such as the structure of the METS file.

As indicated in R2, in principle our archives are open to the public, which means that re-use is permitted by default. Any restrictions on use and re-use are explicitly mentioned on the various collection pages on the heritage portal. When digitizing archive objects, the RAZ prioritizes material that is most often consulted by users and visitors. In addition to this planned approach to digitization, the designated community can request digitization of archive objects using a scan-on-demand service – this accounts for about 10% of all digitization efforts.

Links:

- [PRONOM Database](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Information Technology & Security

R14 Storage & Integrity (R14)

R14. The repository applies documented processes to ensure data and metadata storage and integrity.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

The RAZ's e-depot repository is an Archivematica implementation hosted by Dutch supplier Vitec Memorix, and consists of a test environment and a production environment. Within the production environment, there are three separate locations to store the digital archive objects of the three municipalities whose archives are kept and managed by the RAZ. During the ingest process, the e-curator manually selects the appropriate storage location. All locations are managed in the same way, as their contents need to be preserved permanently and are subject to the same legal requirements. Any private archives the RAZ may receive in the future will also be stored in the e-depot permanently and will therefore be managed in the same way as the archived public records.

Regionaal Archief Zutphen (part of Gemeente Zutphen)

The RAZ does not store multiple copies of the same object in the repository. In fact, it is technically impossible to do this. The repository is based on a single storage, multiple usage approach: an archive object can be ingested in one SIP and linked to multiple metadata files, ensuring it will be accessible using either metadata file.

As the e-depot repository is a facility for permanent storage and preservation, the RAZ does not delete any data or metadata from it. The only reasons to delete data and metadata would be the termination of one of the service contracts, in which case the digital objects are returned to the depositor who is the owner of the digital objects, or the RAZ's decision to end the contract with Vitec Memorix in favour of another storage and hosting supplier, in which case the entire content of the repository will be moved to another 'e-depot' facility.

Data integrity

The Storage and Management Strategy stipulates that archive objects submitted to the RAZ must be accompanied by TMLO compliant metadata. In this profile, a checksum is a compulsory metadata element (TMLO 21.7 Physical Integrity). Upon ingest into the repository, a checksum is known for every file and its fixity can be tested. The ingest process is described in detail in chapter 5.6.2. of the Preservation Plan.

The completeness of the supplied data and metadata is also checked during the ingest process. This is done by means of various jobs in the 'Verify transfer compliance' micro-service. For example, jobs which check the validity and completeness of metadata on the basis of a TOPX 2.3 diagram, package contents, duplicate files, viruses, file format identification, etc. This is documented in chapter 5.6.2 of the Preservation Plan. After ingest, the digital archive files are stored in the storage environment.

The entire ingest process and all changes in data, version management and metadata in storage are logged in the Metadata Encoding and Transmission Standard (METS) metadata file. This METS file is stored with the digital archive documents in the AIP.

Data corruption and deterioration

For all Archivematica environments which Vitec Memorix hosts and facilitates for its customers, backups are created each night and these backups are kept for 62 days (= two months) before the backup cycle starts again (i.e. on day 63, the backup of day 1 will be overwritten). For this backup strategy, automated monitoring and notification functionalities are in place which enable Vitec Memorix' system administrators to act in time in case something goes wrong, so it's guaranteed that customers will not be put in a position that they will have no backup available.

Corruption of data objects is prevented at the storage facility by fixity checks at block level for all hosting and storage environments, including the Archivematica environments, which means that a file (any file) gets a fixity check each time it is accessed, either with read or write access. On top of this, each month fixity checks are run on the entire hosting and storage environment, in order to guarantee that files which are not often accessed still get a regular fixity check.

In addition, Parity storage is used. This means that the data is stored on the disks extremely securely, which ensures that the storage is consistently "healthy". Bitrot or other forms of file degradations are automatically healed by the system.

Data recovery is implemented as follows: Depending on what must be recovered, the data can just be copied back, or a database can be read in again. This is limited to the storage period of the back-ups.

Links:

- [TOPX 2.3 XSD schema](#)
- [METS metadata](#)
- [Continuity Plan](#)
- [Storage and Management Strategy](#)
- [Service Level Agreement](#)
- [Additional agreements regarding Archivematica](#)
- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

R15 Technical Infrastructure (R15)

Regionaal Archief Zutphen (part of Gemeente Zutphen)

R15. The repository is managed on well-supported operating systems and other core infrastructural software and hardware appropriate to the services it provides to its Designated Community.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Response:

The technical infrastructure is described in chapter 6 of the Preservation Plan.

Regarding infrastructure, Archivemata is based on the OAIS model, and scalable. Equipment is housed in professional data centres. The data centres use the following standards and references: ISO 9001, 14001, 27001, 50001. OHSAS 18001. ISAE 3402. AMS-IX. PCI-DSS. The hardware and software used were designed and developed by Vitec Memorix for the specific target groups. Any changes to the technical infrastructure are handled by Vitec Memorix. Vitec Memorix also monitors needs for technical change.

Vitec Memorix has two data centres, which are connected with a double glass fibre connection. Both environments are set up with complete redundancy and meet the highest standards for security and reliability. The main site is located in Amsterdam, the co-site in Heerhugowaard. The secondary system in Heerhugowaard can replace the entire primary system in case of an emergency.

Important points in the architecture are:

1. Replication of data

The stored data is continuously replicated from the primary site to the fail-over site. This ensures that all data is secured at geographically separate sites.

2. Snapshots

Instead of creating back-ups, Vitec Memorix works with snapshots. This technology is unique for the file system used by Vitec Memorix (ZFS). Snapshots make it possible to go back in time to a snapshot (increments of 1 hour) up to the last saved back-up. This is also possible in the case of, for example, encryption (ransomware cybercrime, etc.). It is an extremely advanced method of security and certainty without the administrative and storage burden of (incremental) back-ups (to avoid confusion we do use the term 'back-up' when answering the questions, even though they are 'snapshots'). The term 'back-up' is also used in the storage and management strategy and the preservation plan).

3. Specific servers are set up for different tasks in the architecture. For example, image servers, streaming servers, file conversion servers, application servers, etc. The division of tasks makes it easy to deploy extra strength per task if necessary.

Links:

- [Preservation plan](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Thank you for the clarification.

Thanks for the update - I am assuming then that Vitec Memorix also monitors needs for technical change. Correct? It would be useful to make it more explicit.

R16 Security (R16)

R16. The repository protects the facility and its data, metadata, products, services, and users.

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Response:

The RAZ has signed a processor's contract with Vitec Memorix. Vitec Memorix was required to demonstrate that it has complete command of data security and the protection of personal data. Vitec Memorix has demonstrated an appropriate security level with the ISO-27001 certificate. The certificate specifically states the scope: "The digitisation of heritage (including audio/visual heritage) and the development of web-based solutions for the benefit of the management, enrichment, opening and long-term storage of digital heritage." All Archivematica environments and the data and metadata they hold are subject to the same level of security. Vitec Memorix has taken various measures, including:

- Logical access control – using strong passwords that are changed very regularly
- Screen locks
- Physical measures for access security
- Securing network connection using TLS technology (formerly SSL)
- Purpose-specific access to personal data
- Checking assigned authorities

The adequacy of data security was revealed by an audit executed by the Chief Information Security Officer (CISO) of the municipality of Zutphen, who declared on 30 November 2018: "The certification shows the set-up and existence of the technical and organisation measures. This, combined with the supplied SLA are, for now, sufficient to guarantee the availability and integrity and confidentiality of the data processed by Picturae (now Vitec Memorix, MH) on behalf of the municipality of Zutphen".

The continuity plan of the RAZ was mentioned earlier (R3). Vitec Memorix is ISO 9001 certified for quality management systems.

In addition, the following can be stated specifically on back-up and recovery:

Critical components of the infrastructure are installed with full redundancy. The entire environment is also monitored in order to detect disruptions early.

Checksumming and data scrubbing are used. The correctness of the data is checked and repaired if necessary with every read command. The correctness of all data is checked monthly. If a checksum is incorrect, system administration is warned automatically. If a discrepancy is detected by the system, system administration will take action and, for example, replace a pre-failing disk. Data loss will be recovered using a back-up. Back-ups are checked daily. If an error occurs, the system administration is notified automatically.

When a storage system is replaced, all data is synchronised with the new system and checked with the aid of checksums. The new system will be taken into use when they are in sync.

Links:

- [Continuity Plan](#)
- [Preservation plan](#)
- [Processor contract](#)

Reviews

Reviewer 1:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Applicant feedback

R17 Applicant Feedback

We welcome feedback on the CoreTrustSeal Requirements and the Certification procedure.

Compliance level:

In Progress: the repository is in the implementation phase - 0

Response:

Regionaal Archief Zutphen (part of Gemeente Zutphen)

Not sure why there is a level of compliance in the applicant feedback section.

Despite the revisions that aim to minimise perceived overlap between the requirements I found myself typing the same information multiple times across the application.

Links:

Reviews

Reviewer 1:

Compliance level:

In Progress: the repository is in the implementation phase - 0

Comments:

"Not sure why there is a level of compliance in the applicant feedback section. "

--> Board comment: unfortunately we could not change this in the online tool at the moment. Please ignore it.

Reviewer 2:

Compliance level:

Implemented: the requirement has been fully implemented by the repository - 1

Comments:

Thank you for the revisions, I have now accepted the changes from my end.

"Not sure why there is a level of compliance in the applicant feedback section. "

--> Board comment: unfortunately we could not change this in the online tool at the moment. Please ignore it.