Assessment of product against OAIS compliance requirements

Product name: Repository for Authentic Digital Objects (RODA)

Date of assessment: 25/11/2013

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Scoring: Use 0 to 3 range, where the requirements are: not met (0), partially met (1), fully met (2), exceeded (3).
Score weighting uses Craig Borvsowich's *Constructing a Weighted Matrix* (2006).
TOTAL = Weight x Score.

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
001: ingest mixed content	Essential	Y	Capable of ingesting text documents, raster images, relational databases, video, and audio. A plug-in mechanism enables RODA to easily support additional formats.		**Version 1.2.0 added built-in preservation support to presentations, spreadsheets and email formats. Check: https://github.com/keeps/roda/releases**	5	2	10
002: import records from EDRMS	Conditional	Y	Integration with third-party document management software via SOAP Services or client API.	*No explicit mention of EDRMS. Integration would have to be demonstrated and outputs verified. No mention of metadata integration.*	**Full integration is possible, including metadata. Integration with specific systems is being developed on a case-by-case basis (e.g. for the Brasilian National Archive and its in-house system SIAN).**	2	1	2
003: AIP	Essential	Y	When the ingest process			5	2	10

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creation			terminates, SIPs are transformed into AIPs.					
004: UID assignment	Essential	?	Not known	*Not explicitly stated, but likely that this is performed.*	**On ingest, a unique identifier is created for each digital object. Furthermore, RODA supports Handle system to create a persistent identifier, which provides persistent location of resources.**	5	1	5
005: virus and quarantine	Essential	Y	SIPs are checked for viruses. Clam anti-virus is being used under the hood to perform this task.			5	2	10
006: file format identification	Essential	Y	RODA invokes the file Format Identification service provided by CRiB.		**Since version 1.2.0, RODA uses Droid to identify mime type and PRONOM ID. In roadmap it is planned for version 1.3.0 to upgrade this support to the use of several file format identification tools, such as FIDO.**	5	2	10
007: validation	Essential	Y	Process for validation is outlined in literature.	*Only JHOVE and DROID are referenced*	**SIP and descriptive metadata sintatic validation are done on ingest. Current 1.2.0 only uses JHove to validate, but ongoing development is being done to increase validation to several tools wrapped using**	5	1	5

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					FITS. Several file format characterization tools are being created by KEEPS and integrated within FITS. Check: https://github.com/keeps/fits-testing#results https://github.com/keeps/fits/commits/keeps http://www.openplanetsfoundation.org/blogs/2013-11-06-fits-blitz			
008: checksums	Essential	Y	Files included in the SIP are accompanied by a checksum string.			5	2	10
009: technical metadata extraction	Essential	Y	Ingest is composed by a configurable multi-step workflow that validates submitted information and also extracts technical metadata from ingested files.		**Same as 007.**	5	2	10
010: descriptive metadata	Essential	Y	Descriptive metadata is based on the International Standard for Archival Description (ISADg) and is supported by the EAD/XML standard.			5	2	10
011: preservation metadata	Essential	Y	RODA follows open standards using PREMIS for preservation			5	2	10

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			metadata.					
012: permanent storage	Essential	Y	Data storage is managed by Fedora Commons. Data is stored on the file system separately from the metadata.			5	2	10
013: managed storage	Essential	?	Elementary tasks can be performed at the Data Management and Archival Storage level. Examples of such services are ingest, add a data stream to an object, get data stream, purge an object, find objects and list data streams.	*Further detail required in order to fulfil this requirement.*	**What details are needed? All storage concerns are treated by the Fedora Commons framework, which allows advanced storage management systems, such as iRODS.**	5	1	5
014: error-checking	Essential	N	No mention of ability to perform integrity checking on storage.	*Further details required as this functionality is not clear from the literature.*	**A plugin allows fixity checks on all content. The result of the fixity check is registered in the PREMIS metadata. Other checks can also be performed via plugins.**	5	0	0
015: AIP to DIP transformation	Essential	Y	AIPs can be transformed to DIPs and delivered to the consumer.			5	2	10
016: technical metadata in database	Essential	Y	Fedora implements the common digital repository features, as digital object (and metadata) storage abstraction and relationships between	*No explicit mention of technical metadata*	**The following short-paper describes the RODA "molecular" data model in fig. 3.** **http://repositorium.sdum.uminho.pt/bitstream/1822/9**	5	2	10

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			objects.		**408/2/OR09-0.3.pdf Technical metadata is kept inside the PREMIS metadata, on an adequate field. Standards are used, such as MIX for image metadata.**			
017: descriptive metadata in database	Essential	Y	Fedora implements the common digital repository features, as digital object (and metadata) storage abstraction and relationships between objects.		**See 16.**	5	2	10
018: preservation metadata in database	Essential	Y	Fedora implements the common digital repository features, as digital object (and metadata) storage abstraction and relationships between objects.	*No explicit mention of preservation metadata*	**See 16.**	5	2	10
019: rights metadata in database	Conditional	Y	Records are organized hierarchically but are kept separately within the Fedora Commons content model. Relationships between metadata are created using Fedora RDF.	*No explicit mention of rights metadata*	**The XACML functionality of Fedora Commons is used to define, keep and enforce the rights metadata.**	2	2	4
020: database	Essential	?		*We can't tell from the*	**All functionalities are**	5	0	0

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ease of use				*literature and the archivist would have to verify this.*	**available on the RODA web user interface.** **http://demo.roda-community.org/** **username: administrator** **password: administrator** **Also, direct access to Fedora functionalities is possible using the Fedora available interfaces:** **username: administrator** **password: administrator** **http://demo.roda-community.org/fedora/rise arch** **http://demo.roda-community.org/fedora/get/ roda:1/fedora-system:3/viewMethodIndex** **http://demo.roda-community.org/fedoragsear ch/rest**			
021: database queries on objects and events	Essential	Y	RODA Core Services are responsible for carrying out complex tasks that compose the ingest workflow, querying the repository in advanced	*Would have to be demonstrated to display full functionality. Specific queries need to be detailed.*	**Complex queries are possible via the RODA interface or Fedora interfaces. See 020 answer.**	5	1	5

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			and abstract ways and carrying out administrative functions.					
022: database updates	Essential	Y	Administration components were developed to allow curators to edit the descriptive metadata.			5	2	10
023: database reports	Essential	Y	RODA includes advanced administration features such as reporting.			5	2	10
024: user requests	Conditional	?		*No explicit information found.*		2	0	0
025: inventories and reports	Essential	?		*No explicit information found.*	**All lists in RODA interface can be exported as PDF and CSV, see the small icons above any list (top-right).** **http://demo.roda-community.org/#ingest.list http://demo.roda-community.org/#administration.event.tasks http://demo.roda-community.org/#administration.log**	5	0	0
026: audit trails	Conditional	Y	All actions performed in the repository by any user are logged for security reasons.			2	2	4
027: automated agreements	Optional	?		*No explicit information found.*	**Classification plans can be provided by producers via a**	0	0	0

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
					special kind of SIP and accepted by the archivist in the ingest workflow. (is this what is meant by automated agreement?)			
028: rights policies	Conditional	?		*No explicit information found.*	**A controlled vocabulary is used on the descriptive metadata to define the access restriction to contents. A plugin was developed to control the access permissions based on this metadata. (is this what is meant as rights policies?)**	2	0	0
029: migration	Essential	Y	Migration processes can be initiated. Preservation planning is supported by a recommendation service that makes educated decisions on the best migration options available and takes into consideration the individual requirements of each client institution.			5	2	10
030: policy enaction	Optional	Y	See 029			0	2	2
031: template design	Optional	?		*Future work will focus on the development specification*		0	1	1

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
				of a long-term preservation format/schema				
032: DIP creation	Essential	Y	Creates a DIP for the consumer	*Unsure if the DIP contains corresponding METS file and how users interact and access DIP.*	**Since version 1.2.0, there are services to download AIP and DIP with corresponding METS. There are also several other ways to download content and get partial DIP packages, such as just the descriptive metadata (EAD), just the preservation metadata (PREMIS) or just the representation files.**	5	1	5
033: DIP delivery	Essential	Y	RODA provides a dashboard to allow the browsing, searching, viewing and downloading of DIP's.	*Partially met due to lack of further information on DIP delivery.*	**Check 032.**	5	1	5
034: AIP to DIP audit	Essential	?		*Functionality not explicitly mentioned.*	**Functionality not supported by default.**	5	0	0
035: access rights	Essential	Y	Users can be created, modified and deleted.			5	2	10
036: managed access	Essential	Y	Accounts for Access providing different ways to search and navigate available metadata as well as visualizing/downloading stored digital objects.			5	2	10
037: consumer front end	Essential	Y	RODA provides a dashboard to allow the			5	2	10

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			browsing, searching, viewing and downloading of DIP's.					
038: finding aid support	Essential	?	Not known	*No explicit mention of integration with access systems.*	**EAD defines finding aids and the search features use them. RODA is it own search portal.**	5	0	0
039: representations	Essential	Y	Download any manifestation (representation) of an entire information object or selected file.			5	2	10
040: readers and access tools	Essential	?	Not known		**RODA as a set of pre-viewers for each file format its supports. This allows readers/access tools that directly function in common web browsers.**	5	0	0
				TOTAL SCORE:			54	253