

Assessment of product against OAIS compliance requirements

Product name: **Preservica**

Sources consulted: Preservica - Service Description - System Functions V4 4 (2013)

Date of assessment: 13/11/2013

Vendor Assessment performed by: Rob Sharpe (Head of Archiving Solutions), Tessella

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	Ingest allows users to load information into the archive in a managed and efficient manner. Preservica provides locally installable (optional) "SIP Creator". Tool to upload ZIP files of content direct via browser and ability to post bulk content on USB drives.		Can also crawl web sites.	5	2	10
002: import records from EDRMS	Conditional	?	The SIP Creator can build submission packages from locally held files and assign descriptive metadata from fragments created elsewhere or by using a GUI.	<i>Broadly this function sounds like it could work for interfacing with outputs from an EDRMS, but it would have to be demonstrated. Explicit support for</i>		2	1	2

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
				<i>EDRM exports is not mentioned. We sense there could be a complex metadata mapping exercise involved.</i>				
003: AIP creation	Essential	Y	Seems to be part of the SIP Creator process.		In fact AIP created from SIP via ingest workflows.	5	2	10
004: UID assignment	Essential	?	Not known	<i>Not explicitly stated, but likely that this is performed.</i>	It is!	5	2	10
005: virus and quarantine	Essential	Y	Virus checking is part of workflow steps to perform quality assurance.			5	2	10
006: file format identification	Essential	Y	Uses File Format Registry based on the UK National Archives PRONOM database.			5	2	10
007: validation	Essential	Y	Identification / Characterisation: DROID 6, JHOVE (JPEG, PDF, HTML, JPEG2000, AIFF, XML, TIFF, GIF, PNG), Native XML (validation only), Java Image IO (for image formats), Jakarta POI (for MS Office), Media Info (for video formats), Entagged Library (for audio formats).			5	3	15
008: checksums	Essential	Y	Checksum verification is part of		Multiple checksum	5	3	15

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			QA workflow. Checksum calculated on storage for each copy. Checksum re-calculated on access or at regular timed intervals on files at rest. If checksum has changed (therefore the file has been changed / damaged) self-heal from an alternate copy (cyclical redundancy).		algorithms also supported			
009: technical metadata extraction	Essential	Y	Built in technical metadata extraction required for preservation.	<i>The specification does not refer explicitly to significant properties, which will be needed.</i>	The system does use significant properties to verify migrations. Not all measured properties are necessarily significant.	5	2	10
010: descriptive metadata	Essential	Y	Descriptive metadata can select from one or more standard metadata schemas provided (display and edit templates included): Encoded Archival Description (EAD) 2002; MODS 3.4; Dublin Core 1.1	<i>No mention made of ISAD(G).</i>	It is possible to hold all ISAD(G) levels and metadata. It is not mandatory though allowing organisations to use different approaches for different content as or if appropriate.	5	2	10
011: preservation metadata	Essential	Y	Implementation of all Preservation Actions via the standard workflow engine allowing more complex pathways or actions to be	<i>No mention made of PREMIS</i>	We are conformant with the PREMIS data model and can export to the PREMIS schema. We also	5	2	10

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			automated. View the audit trail of information and digital objects.		play an active role on the PREMIS Editorial Committee.			
012: permanent storage	Essential	Y	Preservica stores its content within Amazon Web Services (AWS) storage systems. Coordinates storage passing the material into the archival database and cloud storage. Within S3, save files to multiple servers in multiple data centres within a given geography.			5	2	10
013: managed storage	Essential	Y	Unlimited information hierarchy, with digital objects held at any level. Alter the hierarchical position of an information object (move to new collection/ level). Coming soon: Ability to split collection between Amazon S3 (fast storage) and Amazon Glacier (slow, lower cost storage).			5	2	10
014: error-checking	Essential	Y	Integrity checking of all objects held in storage.	<i>This "integrity checking" process refers to the intensive checksum validation process for objects. For</i>	The physical checks of disks are managed by Amazon. Since so many copies are held the risk of this causing an issue is	5	1	5

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
				<i>error-checking we would need evidence that the spinning disks / storage media are checked and refreshed as needed.</i>	miniscule. Note: if this didn't happen, on-going integrity check would detect issues (albeit not necessarily lead to diagnosis of root cause).			
015: AIP to DIP transformation	Essential	Y	Ability to create lower quality presentation copies used for dissemination.			5	2	10
016: technical metadata in database	Essential	Y	"Index selected metadata" is part of automated storage process.			5	2	10
017: descriptive metadata in database	Essential	Y	Metadata is held in Amazon's Web Services Relational Database Service.			5	2	10
018: preservation metadata in database	Essential	Y	Metadata is held in Amazon's Web Services Relational Database Service.			5	2	10
019: rights metadata in database	Conditional	Y	Metadata is held in Amazon's Web Services Relational Database Service.	<i>No mention made of rights metadata, but system is likely to support relevant schemas</i>	We can hold any rights schema. See 028 for how this means rights are protected.	2	1	2
020: database ease of use	Essential	?		<i>We can't tell from the literature and the archivist would have to verify this.</i>	Agree that this is subjective but ease of use is something we take seriously. We have multiple	5	0	0

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
					customers and an active user community. We have just started an exercise in consulting the users on the design of new user interface features.			
021: database queries on objects and events	Essential	Y	View the audit trail of information and digital objects.	<i>Would need to make sure that the audit trail does include repository events.</i>	It does.	5	2	10
022: database updates	Essential	Y	Edit descriptive metadata on any information object.			5	2	10
023: database reports	Essential	Y	Includes a set of standard reports produced in PDF, XML or CSV Ingest Reports (5) Access Reports (1) Data Management Reports (2) Preservation Reports (5) Administration Reports (7)			5	2	10
024: user requests	Conditional	Y	See 023 above.			2	2	4
025: inventories and reports	Essential	Y	See 023 above.			5	2	10
026: audit trails	Conditional	Y	View the files and all metadata (description and audit trail) for any information object.	<i>Would need to make sure that the audit trail does include repository events.</i>	It does.	2	2	4
027: automated agreements	Optional	Y	Maintain Transfer Agreements with content suppliers.			0	2	0
028: rights policies	Conditional	?	No explicit information found,		Preservica has	2	0	0

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			but see 032.		comprehensive ability to control user roles, assign privileges to records and to assign privileges to roles. Flexible metadata system allows any rights metadata to be added but important this is linked to setting privileges to get the system to enforce restrictions.			
029: migration	Essential	Y	<p>Optional workflow to migrate file formats on ingest using user defined migration pathway (normalisation).</p> <p>Ability to perform migrations including post-migration verification of component-level essential characteristics.</p> <p>Ability to create new “Digital Master” preservation copies.</p> <p>Ability to create lower quality presentation copies used for dissemination.</p> <p>Ability to see and compare pre- and post- migration component</p>			5	3	15

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			information. Tools for Migration : for example Native Java Image library (most image formats), Oracle Open Office (various office formats to PDF and PDF/A), Imagemagick (most image formats), FFMPEG (various AV formats).					
030: policy enactment	Optional	Y	Implementation of all Preservation Actions via the standard workflow engine allowing more complex pathways or actions to be automated.			0	2	0
031: template design	Optional	Y	Manage schemas used for content Description.			0	2	0
032: DIP creation	Essential	Y	Launch Access workflows, for example creating a Dissemination Information Package (DIP) for download or delivery, transforming metadata for download into preferred schema either using the provided METS transform or a user provided transform, and sending notifications by e-mail and/or text when the DIP is ready for download.			5	3	15
033: DIP delivery	Essential	Y	Preservica provides a Web			5	2	10

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			based "Explorer" to allow the browsing, searching, viewing and downloading of all metadata and content.					
034: AIP to DIP audit	Essential	Y	View the files and all metadata (description and audit trail) for any information object.			5	2	10
035: access rights	Essential	Y	User Management: Create and suspend users; Create roles and assign to users; Users requested new password. Comprehensive security model for information objects. Define tags saying which actions can be performed by which user roles. Assign tags to collections and records (deliverable units) allowing fine grain user access control to information objects.			5	2	10
036: managed access	Essential	Y	Ability to control access to content (or content and metadata) through roles and access control lists.			5	2	10
037: consumer front end	Essential	Y	Preservica provides a Web based "Explorer" to allow the browsing, searching, viewing and downloading of all metadata and content.			5	2	10
038: finding aid support	Essential	Y	Encoded Archival Description (EAD) 2002	<i>ISAD(G) is not mentioned.</i>	See 010	5	2	10

Requirement	Necessity	Met?	How met	Comments	Vendor Comments	Weight	Score	TOTAL
			MODS 3.4 Dublin Core 1.1 Alternately, descriptive metadata can make use of user provided descriptive metadata schemas.					
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.	<i>No explicit specification found</i>	Server-side rendering framework written and will be released in March 2014.	5	0	0
				TOTAL SCORE:				327

