Government of South Australia

State Records of South Australia

Metadata Mapping

Metadata mapping is a way of associating the metadata elements in one schema to the equivalent elements in another schema. In the context of capturing metadata in recordkeeping systems, this requires that all mandatory metadata identified in the *South Australian Recordkeeping Metadata Standard* (SARKMS) and *Victorian Electronic Recordkeeping Standard* (VERS) are mapped to the equivalent tables and fields in the recordkeeping system database.

Why map metadata?

Metadata mapping is used to:

- ensure that all mandatory metadata is being captured by a system

- migrate data from one system to another and assist in migration as a result of machinery of government, ministerial, portfolio and internal agency restructures

- secure interoperability between databases eg a business system and an electronic document and records management system (EDRMS)

- assist with day to day recordkeeping processes such as record creation, capture, classification, storage, preservation, access and security, sentencing, archiving, disposal, searching and reporting

- assist in compliance with the *State Records Act 1997* and other legislation, as well as the Adequate Records Management Standard and other records management policies and standards.

What metadata needs to be mapped?

State Records' standards for EDRMS and business systems require that mandatory metadata identified in SARKMS and VERS be captured and managed for official records.

The template, below, includes a column labelled VERS elements, which maps equivalent SARKMS and VERS metadata. The *EDRMS Design Standard* contains Metadata Profiles and a Metadata Dictionary which are also useful references when matching equivalent SARKMS and VERS metadata elements to system tables/fields.

There are a number of VERS metadata elements identified in the Metadata Dictionary and highlighted in blue that must be captured, but which may not have an equivalent in SARKMS. In the main, these are elements associated with the creation of VEOs (VERS encapsulated objects), used to transfer permanent digital records to a digital archive. Agencies that have not implemented the creation of VEOs are not required to map these VERS elements.

Definitions

Entity – SARKMS is based on a three-entity model of Record, Agent and Function. In business environments, a system will be designed to identify individuals and workgroups, allocate responsibilities and assign permission to work with a particular set of records. The relationships can be demonstrated by the following:

Agents (people, workgroups) do/carry out Functions (business activity)

Functions are documented in Records

Records are used by Agents

Agents create and manage records

Metadata element and element qualifiers - Each entity (Record, Agent or Function) has a number of elements and element qualifiers that describe the specific metadata to be captured for that entity. A number of elements apply to all three entities. For example, Name is mandatory for all entities - each agent requires a Name, each function requires a Name and each record requires a Name.

A metadata element may be referred to as a Container. The element Identifier is a container, and this indicates that it does not require an equivalent metadata field, but that it is used to logically group the associated element qualifiers, Domain, Identifier String, Barcode, Person Identifier, etc.

The element Name is not a container. This indicates that it requires an equivalent metadata field. It also logically groups its associated element qualifiers of Alternative Name and Abbreviated Name.

See the Introduction of SARKMS for more information.

Template

The attached template can be used for mapping SARKMS and VERS metadata to the metadata captured within an agency's EDRMS or business system. The information recorded here should document, and serve as evidence, that metadata is being captured and managed in accordance with State Records standards.

Mandatory metadata is indicated by **bold font**.

This template is not definitive and should be customised to accommodate agency requirements. Columns can be added or deleted as necessary. It is for the agency to decide the method that suits their purpose and best conveys to SRSA the ability of the system to capture all mandatory metadata.

Matching metadata from one schema to another is not always a clear one-to-one process. Agencies should be aware that there may be a 'one to many' relationship, or that the meaning of an element in one schema may not have a 100% equivalent in the other schema.

Agencies should carefully consider whether they are including all of the necessary metadata in their mapping document.

Example 1: A record entity can have a *category* of 'item', 'file', 'folder', 'box', 'consignment', 'series' or 'system'. A record with a *category* of 'item' may have a field in the system called 'item_no' where the element *identifier string* is stored. However, a record with a *category* of 'file' could map the element *identifier string* with the system field 'file_no'.

Example 2: An agent entity may have a *category* of 'individual' or 'agency'. The *name* element for an individual may be captured in the fields 'firstname' and 'surname'. The *name* element for an organisation may be captured in a field 'organisation name'.

Example 3: A record entity may have a *category* of 'file' or 'item'. The *name* element for file may be captured in the field 'filename'. The *name* element for a document may be captured in the field 'document_title'.

For example:

Option 1: Map metadata using the template in this document and identify the individual category metadata fields

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
RECORD ENTITY					
2 Identifier	CONTAINER				
	2.1 Domain				
	2.2 Identifier String			A unique number is assigned to documents (category: item) Doc_no A unique number is assigned to folders/files (category: file) Record_no A unique number is assigned to a group of files (category: box) Box_no 'Consignment number' is a field on Box record type	The system automatically assigns unique numbers to documents and files on creation/registration Box numbers are allocated manually Consignment numbers are allocated manually

Option 2: Map metadata in separate tables according to category

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
RECORD ENTITY **Category: Item**					
2 Identifier	CONTAINER				
	2.1 Domain				
	2.2 Identifier String			A unique number is assigned to documents (category: item) Doc_no	The system automatically assigns unique numbers to documents on creation/registration

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
RECORD ENTITY **Category: File**					
2 Identifier	CONTAINER				
	2.1 Domain				
	2.2 Identifier String			A unique number is assigned to folders/files (category: file) Record_no	The system automatically assigns unique numbers to files on creation/registration. Numbering is based on year plus a sequential number.

Option 3: Relationship type and relationship definition can be detailed in a matrix, as shown in the tables below (incomplete) (These relationships are taken from Appendices I and J of SARKMS)

Relationship type	Relationship definition													
	Contains	Controls	Has format	Has version	Is controlled by	Is format of	Is part of	Is referenced by	Is require by	Is version of	Precedes	References	Requires	Succeeds
Record to record														
Item to item			X			X	X			X	X		X	X
Item to file					X									
Item to folder	X													
Item to box	X													
Item to consignment	X													
Item to series	X													
Item to system	X													
File to item	X													
File to file						X	X							X
File to folder	X						X							

Relationship type	Relationship definition			
	Is controlled by	Is owned by	Is approved by	In custody of
Record to agent				
Item to external author	X			
Item to individual	X		X	X
Item to position	X		X	X
Item to workgroup	X	X		X
Item to section / unit	X	X		X
Item to business group	X	X		X
Item to agency	X	X		X
Item to mechanism	X			X
File to individual	X			X
File to position	X			X
File to workgroup	X			X

Relationship type	Relationship definition		
	Documents	Is referenced by	Is required by
Record to function			
Item to transaction group	X		
Item to business activity	X		
Item to business function	X		
Item to government function	X		
File to transaction group	X		
File to business activity	X		

File to business function	X		
File to government function	X		
Folder to transaction group	X		X
Folder to business activity	X		X
Folder to business function	X		X
Folder to government function	X		X

In the template, the three columns Definition/Purpose, Table/Field, Comments should be populated with data describing the agency's recordkeeping system. Some data has been filled in to serve as examples of what is required. This example information should be deleted and agency specific information entered. Agencies may also use the element Definition and Purpose that appear in SARKMS for assistance in populating the Definition/Purpose column.

Further Reading

South Australian Recordkeeping Metadata Standard (SARKMS), SRSA www.archives.sa.gov.au

EDRMS Design Standard, SRSA www.archives.sa.gov.au

Victorian Electronic Recordkeeping Standard (VERS) 99/007 Public Records Office of Victoria, http://prov.vic.gov.au/government/vers/standard-2

GDS21 Certification Process Information Sheet, SRSA www.archives.sa.gov.au

Version control

Version number	Date of issue	Details
1.0	19 August 2013	First issue

Classification: Public

RECORD ENTITY

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
0 Entity	None		**Example** There are only three possible values for this element: 'Record', 'Agent', or 'Function'		
1 Category	None	*M059 Aggregation Level* *M114 Document* *M142 File* *M104 Transaction*		**Example** **Symbols/Icons** are used to identify the Record Category. For Example:- Folders have the following icon: Documents icons also identify the format/type of document. Following are some of the icon's used:- Scanned Document PDF Document E-Mail Word Document	
2 Identifier	CONTAINER				
	2.1 Domain				
	2.2 Identifier String	*M065 Record Identifier* *M099 VEO Identifier* *M101 Series Identifier* *M102 File Identifier* *M103 VERS Record Identifier*		**Example** Table: Records / Field: ID Table: Record / Field: file_no	**Example** The system automatically assigns a document number at registration. A folder number is assigned to each folder at creation.
	2.3 Identifier Scheme				
	2.4 Barcode				
	2.8 Version Number				
	2.9 Version Status				
	2.10 Reference Identifier				
3 Name		*M032 Title*		**Example**	

RECORD ENTITY

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
		M35 Title Words (Container) *M117 Document Title (Document)*		Record / file_name Document / document_name	
	3.1 Alternative Name	*M36 Alternative*			
	3.2 Abbreviated Name				
4 Description	None	*M040 Description* *M119 Document Description* *M111 Business Procedure Reference* *M112 Transaction Reference* *M153 Auxiliary Description*		**Example** Record / Precis	
5 Date	CONTAINER	*M054 Date*			
	5.1 Creation Date/Time	*M055 Date/Time Created* *M123 Document Date*		**Example** File / Creation_date Document / Creation_date	
	5.2 Received Date/Time			**Example** File / Received_date Document / Received_date	
	5.3 Registration Date/Time	*M057 Date/Time Registered*		**Example** File / Registered_date Document / Registered_date	
	5.4 Transfer Date				
	5.5 Contents Date Range	*M049 Period Name*			
	5.8 Date Issued				
	5.9 Date Approved				
	5.10 Published Date				
6 Classification Scheme	CONTAINER				
	6.1 Function Descriptor	*M050 Function* *M051 Function Descriptor* *M155 Document Function*			

RECORD ENTITY

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
	6.2 Activity Descriptor	*M052 Activity Descriptor*			
	6.3 Subject Descriptor 1	*M053 Third Level Descriptor*			
	6.4 Subject Descriptor 2	*M37 Subject*			
		M118 Document Subject			
	6.5 Keyword	*M39 Keyword*			
7 Coverage		*M046 Coverage*			
		M122 Document Coverage			
	7.1 Jurisdiction	*M47 Jurisdiction*			
	7.2 Place Name	*M48 Place Name*			
8 Language	None	*M041 Language*			
		M120 Document Language			
9 Type **Mandatory for 'item' category**		*M058 Type*		**Example**	
		D124 Document Type		Document / doc_type	
		M110 Transaction Type			
	9.1 Vital Record Mandatory for an Item category, optional for a File category				
	9.2 Vital Record Review Due Date (Use if 9.1 is used)				
10 Format **Mandatory for digital records with a category of 'Item'**	CONTAINER				
	10.1 Media Format	*M61 Media Format*		**Example** Document / media	
	10.2 Data Format	*M62 Data Format*		**Example** Document / format	
	10.3 Medium	*M63 Medium*		**Example** Document / container	
	10.4 Extent	*M64 Extent*		**Example** Document / size	
	10.5 Original Creating Environment	*M125 Document Source*		**Example** Software / sw_name_version	
	10.6 Review Due Date				

RECORD ENTITY

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
11 Relation	CONTAINER				
	11.1 Related Entity Identifier	*M043 Related Item ID* *M113 Transaction Linkage*			
	11.2 Relationship Type				
	11.3 Relationship Definition	*M044 Relation Type* *M045 Relation Description* *M121 Document Relation*			
	11.4 Relationship Date				
12 Access	CONTAINER				
	12.1 Access Rights			**Example** File / determination	**Example** Record access rights are inherited from the related file
	12.2 Rights Type			**Example** File / right_type	
	12.3 Rights Status			**Example** File / right_status	
	12.4 Security Classification	*M025 Security Classification*		**Example** File / sec_class	
	12.5 Dissemination Limiting Marker (DLM) **Mandatory** when 'Government' is applied at 12.4)				
	12.6 Caveat	*M026 Caveat*			
	12.7 Use Conditions	*M030 Usage Condition*			
	12.8 Access Statement	*M029 Access Status*			
	12.9 Determination Date			**Example** Document / acc_determ_date	
	12.10 Review Due Date				
13 Disposal	CONTAINER	*M088 Disposal*			
	13.1 Disposal Schedule	*M089 Disposal Authorisation* *M146 Disposal Schedule*			
	13.2 Disposal Schedule Version				

RECORD ENTITY

SARKMS Element	SARKMS Element Qualifiers	VERS Elements	Definition/ Purpose	Table / Field in [*agency system*]	Comments
	13.3 Disposal Schedule Item No.				
	13.4 Disposal Action	*M90 Sentence*			
	13.5 Date Sentenced	*M147 Disposal Date*			
	13.6 Disposal Status	*M92 Disposal status*			
	13.7 Date Transfer Due	*M091 Disposal Action Due*			
	13.8 Date Destruction Due	*M91 Disposal Action Due*			
	13.9 Date Destruction Approved				
	13.10 Disposal Statement				
	13.11 Disposal Authorising Officer	*M148 Authorizing Officer*			
14 Location	CONTAINER	**M83 Location**			
	14.1 Current Location	**M84 Current Location**			
	14.2 Store Location	*M085 Home Location Details*			
	14.3 Store Definition	*M086 Home Storage Details*			
	14.4 Location Date				
15 Event History	CONTAINER	**M066 Management History** *M071 Use History* *M076 Preservation History*			
	15.1 Event ID	**M067 Management Event** *M072 Use* *M077 Action*			
	15.2 Event Type	**M069 Event Type** *M074 Use Type* *M079 Action Type*			
	15.3 Prior Value				
	15.4 Event Date/Time				
	15.5 Action Officer	**M070 Event Description** *M075 Use Description* *M080 Action Description*			

		RECORD ENTITY			
SARKMS Element	**SARKMS Element Qualifiers**	**VERS Elements**	**Definition/ Purpose**	**Table / Field in [*agency system*]**	**Comments**
16 Precedence (active records only)					
	16.1 Date / Time Action Due By				
	16.2 Date Action Completed				
	16.3 Action Officer				
	16.4 Action Delegator				
	16.5 Action Required				

AGENT ENTITY					
Element	**Element Qualifiers**	**VERS elements**	**Definition/ Purpose**	**Table / Field in [*agency system*]**	**Comments**
0 Entity	None				
1 Category	None				
2 Identifier	CONTAINER				
	2.1 Domain	*M014 Jurisdiction* *M019 Section Name*			
	2.2 Identifier String	*M015 Corporate ID* *M017 Person ID* *M087 RKS ID* *M100 Agency Identifier*	**Example** This element provides for a unique identifier to be allocated to an entity usually at the time of registration. • Uniquely identifies an entity; • Ensures entities are locatable • Acts as a reference point for the entity; and • Provides a link to other related elements and entities	**Example** Person / User_ID Business / ID	**Example** When a user is created a system generated ID is allocated to the user.
	2.3 Identifier Scheme				
	2.5 Position Identifier				
	2.6 Person Identifier	*M013 Agent Type* *M020 Position Name*			
	2.7 Digital Signature				
3 Name		*M23 Digital Signature (Deprecated)*	**Example** The name or title of the entity which is free text. It can also be described with an alternative and/or abbreviated name.	**Example** Person / surname Person / firstname Business / name	
	3.1 Alternative Name	*M016 Corporate Name* *M018 Personal Name*			

AGENT ENTITY					
Element	**Element Qualifiers**	**VERS elements**	**Definition/ Purpose**	**Table / Field in [*agency system*]**	**Comments**
		M116 Document Agent *M106 Originator* *M107 Recipient*			
	3.2 Abbreviated Name				
4 Description	None				
5 Date	CONTAINER				
	5.1 Creation Date/Time			**Example** Business / Enter_date Person / Enter_date	
	5.6 Start Date				
	5.7 End Date				
11 Relation	CONTAINER				
	11.1 Related Entity Identifier				
	11.2 Relationship Type				
	11.3 Relationship Definition				
	11.4 Relationship Date				
12 Access	CONTAINER				
	12.11 Permissions				
15 Event History	CONTAINER				
	15.1 Event ID				
	15.2 Event Type				
	15.3 Prior Value				
	15.4 Event Date/Time				
	15.5 Action Officer	*M68 Event Date/Time*			
17 Contact					
	17.1 Contact Location				
		M021 Contact Details *M022 Email*			

FUNCTION ENTITY					
Element	**Element Qualifiers**	**VERS Elements**	**Definition / Purpose**	**Table / Field in [*agency system*]**	**Comments**
0 Entity	None		**Example** There are only three possible values for this element: 'Record', 'Agent', or 'Function'		
1 Category	None				
2 Identifier	CONTAINER				
	2.1 Domain			**Example** Business / Team_function	
	2.2 Identifier String	*M105 Transaction identifier*		**Example** Function / ID Function / subject_id Function / activity_id	
	2.3 Identifier Scheme				
3 Name					
	3.1 Alternative Name				
	3.2 Abbreviated Name				
4 Description	None				
5 Date	CONTAINER				
	5.1 Creation Date/Time				
	5.6 Start Date				
	5.7 End Date				
11 Relation	CONTAINER				
	11.1 Related Entity Identifier				
	11.2 Relationship Type				
	11.3 Relationship Definition				
	11.4 Relationship Date				
12 Access	CONTAINER				
	12.4 Security Classification				
	12.5 Dissemination Limiting Marker (DLM)				
	12.6 Caveat				
	12.11 Permissions				

FUNCTION ENTITY

Element	Element Qualifiers	VERS Elements	Definition / Purpose	Table / Field in [*agency system*]	Comments
15 Event History	CONTAINER				
	15.1 Event ID				
	15.2 Event Type				
	15.3 Prior Value				
	15.4 Event Date/Time				
	15.5 Action Officer				
18 Mandate	CONTAINER	*M093 Mandate*			
	18.1 Mandate Type	*M094 Mandate Type*			
	18.2 Mandate Name	*M096 Mandate Name*			
	18.3 Mandate Identifier	*M097 Mandate Reference*			
	18.4 Mandate Description				
	18.5 Mandate Date				
	18.6 Mandate Jurisdiction				
	18.7 Mandate Domain				
	18.8 Mandate Audience				