



Technical and functional description of the SCONE demonstrator service

Final Report of the RSLP SCONE project
Annexe B.1

1 Technical description

1.1 Background

The SCONE project used the CAIRNS service¹ infrastructure as the basis for its technical development.

1.2 Software

1.2.1 Data storage

Data for collection level descriptions is stored in a relational database. MS Access was used to prototype the database structure. The database was transferred to MS SQL Server for the demonstrator service.

1.2.2 Data publishing

Macromedia ColdFusion is used as the database server. Web pages, forms, and server-side scripts are maintained using Macromedia Dreamweaver UltraDev.

1.3 Development of the SCONE database

1.3.1 Model

The database structure is based closely on *An analytical model of collections and their catalogues*². The model is presented as an entity-relationship diagram, with definitions of the attributes of the specific classes and types of entity and their relationships. Data elements forming each attribute are not specifically defined, but attribute definitions and notes give a useful preliminary analysis. The model is confined to a single collection level description, although there is a discussion on relationships between multiple collections.

1.3.2 Implementation of model in the database schema

In the database, data elements are implemented as columns or fields of tables corresponding to the entity and relationship types and subtypes of the model.

1.3.3 Implementation of Entities and Relationships.

The table below shows how entities and relationships from the model are implemented as tables in the SCONE database. Reference numbers used in the model are given in brackets after the entity and relationship names.

¹ Co-operAtive Information Retrieval Network for Scotland. URL: <http://cairns.lib.strath.ac.uk/>

² An analytic model of collections and their catalogues: a study / carried out by Michael Heaney on behalf of the UK Office for Library and Information Networking with support from OCLC. 3rd issue, rev. - Oxford, 2000.

1.3.3.1 Table 1: Mapping of Entities and Relationships to database tables.

Entity	Database table
Collection (5.1.3)	Collection
Location (5.1.4)	Location
Location: Physical repository	LocationPhys
Location: Electronic repository	LocationVirt
Agent (5.2)	Agent See 1.3.4
Agent: Person	AgentPers
Agent: Corporate body	AgentCorp
Analytic-Finding-Aid (5.5.3)	Collection See 1.3.5
Relationship	Database table
Sells-to (5.4.4)	SellsTo
Delegates-To (5.4.6)	DelegatesTo
Creates (5.4.7)	CreatesContent
Produces (5.4.8)	Produces
Collects (5.4.9)	Collects
Owns (5.4.10)	Owns
Administers (5.4.11)	Administers
Is-Located-In (5.4.14)	IsLocatedIn
Is-Described-By (5.4.15)	IsDescribedBy

The database structure implements relationships between entities explicitly as separate tables in order to accommodate relationship attributes, and many-to-many instances. e.g. The model specifies that location opening hours is a data element of the attribute **Access conditions** of the relationship **Administers**.

1.3.4 Treatment of agents

All **Agent** entity types have the same data element set, so a particular instance of an agent is recorded once and can be used many times for any type. Specific **Agent** entity types are implicitly defined by the relationship between the **Agent** and **Collection** or **Location** entities:

1.3.4.1 Table 2: Mapping of Agent types to related database tables

Agent type	Defined by related tables
Administrator	Agent:Administers:Location
Collector	Agent:Collects:Collection
Creator	Agent:CreatesContent:Collection
Owner	Agent:Owns:Collection
Producer	Agent:Produces:Collection

1.3.5 Treatment of catalogues

Analytic finding aids such as library catalogues are analyzed in the model as collections of metadata.

Information about a catalogue is treated as a collection level description in the SCONE database.

A catalogue is identified by the **Collection type** "catalogue", implemented in the **Collection** table as the Boolean column **IsTypeCollection**.

The relationship between a collection and its catalogue is implemented as the relationship **Collection:IsDescribedBy:Collection**.

1.3.6 Treatment of multiple collections

Hierarchical relationships between **Collection** entities are implemented as the relationship **Collection:HasPartCollection:Collection**.

Other relationships are implemented as the relationship

Collection:HasRelatedCollection:Collection, with the exception of the special case of catalogues. See 1.3.5

1.3.6.1 Hierarchical relationships and granularity

To avoid unnecessary duplication, data about catalogues, location and access are linked only once to a hierarchically-related set of collections.

The link is made to the highest level **Collection** in the set to which the data applies; that is, at the same level of granularity.

It is assumed that the information is valid for all sub-collections in the hierarchy.

1.3.7 Hierarchies in Locations and Agents

Hierarchical relationships between **Location** entities, and between **Agent** entities, are implemented in the database as the relationships **Location:HasPartLocation:Location** and **Agent:HasPartAgent:Agent**.

1.3.8 Relationship with RSLP schema

The RSLP collection description schema³ and associated data entry guidelines⁴ were under development by UKOLN during the first year of the SCONE project, and were not available during the initial stages of development of the database.

The project Technical Advisor was closely involved in the consultation process, attending the second concertation day⁵, being a member of the RSLP Collection Description Working Group⁶, and giving a presentation at the third concertation day⁷.

The SCONE database schema has a richer structure than the RSLP schema, and can be mapped to it by combining appropriate data elements.

1.4 Data sources

The project had access to several machine-readable datasets containing information relating to Scottish collections.

This data was used to refine and develop the data element definitions suggested by the model for the single collection entities and relationships, and inter-collection relationships. Relevant parts of the datasets were used to populate the database.

The database driving the CAIRNS service was used as a starting point for development.

1.4.1.1 CAIRNS

1.4.1.1.1 Definition and content

The original CAIRNS database recorded information about the collections and catalogues of the 16 partners in the project and service, including collection titles and locations,

³ RSLP collection description. Collection description schema. URL: <http://www.ukoln.ac.uk/metadata/rslp/schema/>

⁴ RSLP collection description. Data entry guidelines. URL: <http://www.ukoln.ac.uk/metadata/rslp/tool/?mode=printGuide>

⁵ RSLP collection description concertation day, 18 Feb 2000, London. URL: <http://www.ukoln.ac.uk/metadata/rslp/concertation/2000-02/>

⁶ Minutes of RSLP Collection Description Working Group held on 23rd March 2000. URL: <http://www.ukoln.ac.uk/metadata/rslp/meetings/2000-03-23/>

⁷ The RSLP Collection Level Description framework, SQL, and the SCONE project / Gordon Dunsire. Presented at the RSLP collection description 3rd concertation day, 23 Oct 2000, London. URL: <http://www.ukoln.ac.uk/metadata/rslp/concertation/2000-10/scone/>

administrators, access conditions, and electronic addresses of online Web and Z39.50 catalogues.

1.4.1.1.2 Restructuring

The database structure, in MS Access format, contained separate tables for collections, catalogues, access conditions, and administrators.

These tables were restructured to conform to the model: collection and catalogue title and description data elements were combined in the **Collection** table, location data disaggregated into the **Location** tables, and administrator and access condition information reconfigured as the **Agent:Administers:Location** entity-relationship.

1.4.1.1.3 Use in development

The restructured database of 27 collection level descriptions was subsequently augmented and developed by integrating data from the other sources.

For the sake of clarity, this database is referred to as the SCONE database.

1.4.1.1.4 RCO

The CAIRNS database contained information about collection strengths, taken from the Research Collections Online (RCO) service⁸.

This data was copied to the SCONE database without restructuring, and used to develop an online updating mechanism for the service and extend coverage to the 'new' universities and other general collections⁹.

The RCO data elements are isolated from the SCONE implementation of the model, and are considered as one of several possible structures for the collection strength attribute defined in the model.

1.4.1.2 SWOP directory

1.4.1.2.1 Definition and content

The Directory of official publications in Scotland¹⁰ was digitised, updated, and published on behalf of the Scottish Working Group on Official Publications (SWOP) during the project¹¹. The directory contains information about the collections of publications of governmental and inter-governmental organizations held by the 14 members of the Group.

The information is structured with a high degree of granularity, with a depth of 6 layers of categorization from "National governments" to "Public general acts".

1.4.1.2.2 Restructuring

Collection level records were created in the SCONE database for a general collection of official publications held by each of the group members.

There is considerable overlap in the membership of CAIRNS and SWOP, so the SWOP collections were related as sub-collections of the existing SCONE general collections derived from CAIRNS.

Sub-collection records were created for each level of granularity exhibited in the directory, and related to the member collection.

This resulted in a multi-level hierarchy of **Has-Part** relationships between **Collection** entities. **See 1.4.1.2.2.1**

The member SWOP collections were also related as sub-collections to a high-level group collection, to investigate the effects of poly-hierarchy.

Collection titles were derived from the SWOP member names and directory section labels.

⁸ Research collections online (RCO). URL: <http://scurl.ac.uk/vuc/rco.html>

⁹ Reference to appropriate sections of this report.

¹⁰ Directory of official publications in Scotland. URL: <http://scurl.ac.uk/about/swop/index.html>

¹¹ Reference to appropriate sections of this report.

Governmental and international organization names were mapped to **Corporate agent** records.

A **Creates** and **Produces** relationship were added for each agent and sub-collection, as the organization is considered to be responsible for the content of the publications forming each sub-collection, as well as the publisher.

1.4.1.2.2.1 Table 3: Example of a multi-level collection hierarchy from SWOP

Level	Collection title
1 (top)	SWOP (Scottish Working Group on Official Publications) collection
2	Aberdeen University. Library SWOP collection
3	Aberdeen University. Taylor Library & EDC SWOP collection
4	Aberdeen University. Taylor Library & EDC SWOP - UK collection
5	Aberdeen University. Taylor Library & EDC SWOP - UK - Parliamentary papers collection
6	Aberdeen University. Taylor Library & EDC SWOP - UK - Parliamentary papers - HC collection
7	Aberdeen University. Taylor Library & EDC SWOP - UK - Parliamentary papers - HC - Microfiche collection

1.4.1.2.3 Use in development

This dataset was used to develop data elements for representing parent and child collection relationships, and **Collector**, **Creator**, **Owner** and **Producer** agents.

The data populated 1078 collection level records in the database.

1.4.1.3 SLIR

1.4.1.3.1 Definition and content

The Chartered Institute of Library and Information Professionals in Scotland¹² publishes an annual directory, Scottish library and information resources (SLIR)¹³, containing the names, addresses, and contact details for most library and information organizations operating in Scotland.

The printed directory is derived from a database which was also used to publish the information on a Web site with a variety of search and display options

The database contained a dataset of all cities, towns and villages in Scotland with a population of 1000 or more, grouped by Unitary Local Authority.

An 18 month old version of the database in MS Access format was made available as a data source with the co-operation of SLIC¹⁴.

1.4.1.3.2 Restructuring

Minimal **Collection** records were created for each organization and its branches, with **Collection titles** derived from the organization name, and default **Collection type** of "Collection.Library".

Location records were created for each organization and its branches, with **Location name** derived from the organization name.

The placename dataset was incorporated without restructuring.

Organization names were mapped to **Corporate agents**.

Names of contact persons were mapped to **Personal agents**, and linked hierarchically to the **Corporate agents**.

¹² Formerly the Scottish Library Association. URL: <http://www.slainte.org.uk/cilips/clpshome.htm>

¹³ Scottish library and information resources / edited by Gordon Dunsire and Penny Robertson. – 14th ed. – Hamilton : Scottish Library Association, 2002. – ISBN: 0900649399.

¹⁴ Scottish Library and Information Council. URL: <http://www.slainte.org.uk/slic/slichome.htm>

1.4.1.3.3 Use in development

This dataset was used to develop data elements for *Physical locations*, access conditions in the *Agent:Administers:Location* relationship, and *Administrator* agents. The data populated approximately 1400 collection level records in the database.

1.4.1.3.4 Updating

The data was subsequently brought up to date during the production of the 2002 edition of SLIR.

The SCONE database was used to generate the printed checking forms circulated to Scottish library organizations to update the directory.

The returned forms were used to test the updating facilities of SCAMP¹⁵.

1.4.1.4 ESH

1.4.1.4.1 Definition and content

Exploring Scottish history¹⁶, a directory of genealogical resources held in Scottish libraries, museums and archives, is derived from a database in MS Access format maintained by SLIC.

The database contains detailed descriptions of collection contents selected and defined by local and family history professionals, along with extensive notes relating to collection and location access.

1.4.1.4.2 Restructuring

The database structure was based on SLIR, so a similar restructuring for the SCONE database was carried out.

There was significant overlap in the libraries covered by ESH and SLIR, so duplicate *Location* and *Agent* data was removed.

Appropriate *Collection:HasPartCollection:Collection* relationships were created to link ESH information to SLIR records.

1.4.1.4.3 Use in development

This dataset was used to develop data elements for *Collection* descriptions and access conditions in the *Agent:Administers:Location* relationship, and to test accommodation of less-structured information.

The data populated approximately 380 collection level records in the database.

1.4.1.5 Other sources

Other sources of collection data were identified by browsing Scottish library websites and using web search engines.

Information about the history and provenance of special collections held by SCURL libraries was used to develop data elements for the *Agent:Sells-To:Agent* and *Agent:Delegates-To:Agent* relationships.

1.5 Database field descriptions

Descriptions of SCONE database field used in the SCONE, CAIRNS, and RCO services are given in the appendix. **See 3.1**

1.6 Integration with CAIRNS

The SCONE database is used to drive the "dynamic clumping" facilities of the CAIRNS service to select catalogues for cross-searching.

¹⁵ Scottish Collections Access Management Portal. URL: <http://scone.strath.ac.uk/scamp/index.html>

¹⁶ Exploring Scottish history: with a directory of resource centres for Scottish local and national history in Scotland / edited by Michael Cox. – 2nd ed. – [Hamilton] : Scottish Library Association; Scottish Local History Forum; Scottish Records Association, 1999

1.6.1 Functionality from SCONE

Catalogues can be selected by the collections they describe, using the same search functionality as the SCONE service.

1.6.2 Functionality from RCO

Catalogues can be selected by collection strength defined by the RCO scheme.

2 Functional description

Facilities are provided in the SCONE service for displaying descriptions of single collections, and browsing the descriptions of related collections. Search options are available for retrieving and identifying collections. User support is also available.

2.1 Collection level description

A single complete collection level description is displayed in the SCONE service on a single web page.

2.1.1 Assembly from database

The data elements for the collection level description are assembled from the SCONE database according to the entity-relationship model. Elements from areas under development, such as subject strength, are not included.

2.1.1.1 Data cascade

It is assumed that certain data linked to a collection at one level of granularity apply to all lower levels; that is, the child or sub-collections of the collection.

The data concerns locations and their administration, and catalogues and other finding aids.

If this data is not linked directly to the collection for which a description is being assembled, it is found by checking parent or super-collections up the hierarchy.

The data is then cascaded and incorporated into the collection level description.

2.1.1.2 Functional components

The collection level description is displayed as a set of functional components grouping together data with a common theme, to ensure a coherent and consistent presentation.

2.1.1.2.1 Description

The description component includes the collection description, size (physical characteristics), date ranges of contents and accumulation, notes, local identifier, and collection type.

2.1.1.2.2 Administrative history

The administrative history component covers the delegation of rights or sale of the collection contents, and includes the year, terms of transfer, and the agents involved.

2.1.1.2.3 Location

The location component covers the physical or electronic location of the collection.

Physical locations include the name and postal address, transportation note, opening hours, prior access conditions, and access notes.

Electronic locations include the name, electronic address, and notes about access to the electronic address.

2.1.1.2.4 Related persons and organizations

The related agents component includes the names of all persons and corporate bodies associated with the collection as collectors, item creators, item producers, owners, and subjects

2.1.1.2.5 Related collections

The related collections component includes the titles of other collections which are part of, contain, or are otherwise related to the collection.

2.1.1.2.6 Subjects

The subjects component includes the subject headings assigned to the collection.

2.1.1.2.7 Catalogues

The related catalogues component includes the name, description and notes of catalogues and other finding aids associated with the collection.

2.1.2 Related searches and links

Certain data elements of the collection level description are displayed as hyperlinks which connect to related searches of the SCONE database or associated external websites.

2.1.2.1 Town

The town hyperlink displays the titles of all collections located in that town.

2.1.2.2 Agent name

The agent name hyperlinks display the titles of all collections related to that agent as collector, creator, owner, producer and subject.

2.1.2.3 Related collections

2.1.2.3.1 Hierarchical

The super- and sub-collection title hyperlinks display the relevant collection level description.

2.1.2.3.2 Other

The other related collection title hyperlinks display the relevant collection level description.

2.1.2.3.3 Catalogues

The catalogue title hyperlinks display the web page of the catalogue.

2.1.3 Filters

The display of each functional component can be suppressed by the user, to customize the detail of the collection level description.

The description component is displayed by default if all components are filtered.

2.2 Searching for collections

2.2.1 Keyword searches

The standard keyword search matches a user-supplied string anywhere in the specified index, allowing word or phrase searching with automatic pre- and post-truncation over the full index entry.

Matching is independent of case.

A standard form accepts input of the search string and submits it to the matching process.

2.2.2 Search options

The search menu displays a number of options for browse and keyword searching of collections by title, related agent, subject, and location.

2.2.2.1 Browse collection titles

Titles of all top-level collections are displayed in alphabetical order for browsing and selection.

Top-level collections are defined as those without super or parent collections.

2.2.2.2 Search for words in collection titles

A standard keyword search is applied to collection titles. Matching titles are displayed for browsing and selection.

2.2.2.3 Browse the names of persons and organizations associated with collections

The normalized names of all agents are displayed in alphabetical order for browsing and selection.

2.2.2.4 Search for words in the names of persons and organizations

A standard keyword search is applied to agent names in normalized form. Matching names are displayed for browsing and selection.

Pre-truncation can be forced to provide stem searching.

2.2.2.4.1 Filter for Agent type

A secondary form allows the list of names displayed to be filtered by any combination of agent sub-type (persons, corporate bodies) and relationship between agent and collection (collects, creates, produces, owns, is-subject-of).

2.2.2.4.2 Display of related Collections

On selection of a name, titles of collections related to the agent are displayed in alphabetical order for browsing and selection.

2.2.2.5 Browse collection subjects

Headings of all subjects are displayed in alphabetical order for browsing and selection.

2.2.2.6 Search for words in collection subjects

A standard keyword search is applied to subject topic headings. Matching headings are displayed for browsing and selection.

2.2.2.6.1 Filter for Subject type

A secondary form allows the list of headings displayed to be filtered by subject sub-type (names, topics).

2.2.2.6.2 Display of related Collections

On selection of a heading, titles of collections related to the subject are displayed in alphabetical order for browsing and selection.

2.2.2.7 Browse collection locations by region and town

Names of regions are displayed in alphabetical order for selection.

2.2.2.7.1 Selection of towns

On selection of a region name, all towns in that region are displayed in alphabetical order for selection.

Multiple selections of towns are allowed.

Options to select or de-select all towns are available.

2.2.2.7.2 Display of related Collections

On selection of one or more towns, titles of collections located in those towns are displayed in alphabetical order for browsing and selection.

2.2.2.8 Browse collection locations by town

Names of all towns are displayed in alphabetical order for browsing and selection.

2.2.2.8.1 Display of related Collections

On selection of a town, titles of collections located in that town are displayed in alphabetical order for browsing and selection.

2.3 User support

2.3.1 Page design

Pages are laid out in a standard format of three horizontal sections.

Page title, and homepage and help buttons are displayed in the top section.

The specific content of the page is displayed in the middle section.

Navigation buttons and administrative information are displayed in the bottom section.

2.3.2 IFLA Icon set

Where applicable, buttons use icons taken from the *Bibliographic standard GUI icon set*¹⁷ proposed by the International Federation of Library Associations and Institutions (IFLA).

2.3.3 Navigation to search options

Navigation to the SCONE search menu and a set of specific search options is available on every page.

The specific search options are:

Search for words in collection title

Browse the names of persons and organizations associated with collections

Browse collection subjects

Browse collection locations by region and town

The options were selected as likely to be the most useful for general enquiries.

2.3.4 Help

Several kinds of help are available.

Help pages are displayed in separate browser windows for parallel viewing.

2.3.4.1 Specific help

A specific help page is available for each page of the website.

2.3.4.2 General help

General help on using the service is available from every page.

2.3.4.3 About

Information about the SCONE service is available from every page.

¹⁷ IFLA bibliographic standard GUI icon set. URL: <http://www.scran.ac.uk/iconstd/>

2.3.4.3.1 Guide to the SCONE database

A description of the SCONE database and how collection level descriptions are derived is available.

2.3.4.4 Glossary

A glossary of acronyms and terms is available from every page.

3 Appendix

3.1 SCONE database field descriptions

This information is abstracted from the database data dictionary.

Primary and secondary key fields, and tables consisting only of key columns are omitted. Conformance to the RSLP data entry guidelines (RSLPDEG) is noted where appropriate.

Table: **AccessPrior** (Notes of pre-visit conditions.)

Field: **Statement** (Advice on contact prior to physical access.)

Content standards: Values: By appointment only. Contact before a visit is essential. - Consultation before a visit is advised. - Contact before a visit is not required. - Contact before a visit is not available. - Direct access is not available. - Direct access is not available. Contact for enquiries and help. - Direct access is limited to specific groups.

Table: **AccrualPolicy** (Statements of accrual policy.)

Field: **Statement** (Short statement of accrual policy.)

Content standards: Conforms to RSLPDEG. Values: Closed - Passive - Active - Partial/selective

Table: **Administers** (Agent:Administers:Location relationship.)

Field: **AccessNote** (Note of access conditions.)

Content standards: Conforms to RSLPDEG.

Field: **AccessOpenHours** (Opening hours of location.)

Table: **AgentCorp** (Corporate bodies)

Field: **Email** (Email address of corporate body.)

Content standards: Conforms to RSLPDEG.

Field: **Fax** (Fax number of corporate body.)

Content standards: Conforms to RSLPDEG. International format.

Field: **History** (Administrative and other history of corporate body.)

Field: **HomepageURL** (URL of corporate body homepage.)

Field: **Name** (Name of corporate body.)

Content standards: Conforms to RSLPDEG. Anglo-American Cataloguing Rules.

Field: **Role** (Role of corporate body.)

Field: **Telephone** (Telephone number of corporate body.)

Content standards: Conforms to RSLPDEG. International format.

Table: **AgentPers** (Persons.)

Field: **Biography** (Biography of person.)

Field: **Dates** (Dates of birth and/or death of person.)

Content standards: Anglo-American Cataloguing Rules.

Field: **Email** (Email address of person.)

Content standards: Conforms to RSLPDEG.

Field: **Extension** (Extension to name of person, other than dates.)

Content standards: Anglo-American Cataloguing Rules.

Field: **Fax** (Fax number of person.)

Content standards: Conforms to RSLPDEG. International format.

Field: **Forename** (Forenames and/or initials of person.)

Field: **HomepageURL** (URL of personal homepage.)

Field: **Honorific** (Honorific of person.)

Content standards: Standard abbreviation.

Field: **Postnominals** (Postnominals of person.)

Content standards: Standard abbreviation.

Field: **Role** (Role of person.)

- Field: **Surname** (Surname or family name of person.)
Field: **Telephone** (Telephone number of person.)
Content standards: Conforms to RSLPDEG. International format.
- Table: **Collection** (Collection entities.)
Notes: Uses bit flags to represent **CollectionType**, currently defined by the RSLP's *CLDT enumerated list of collection types*¹⁸.
Field: **Description** (Description of Contents of collection.)
Content standards: Conforms to RSLPDEG.
Field: **Identifier** (Standard identifier code of collection.)
Field: **LocalIdentifier** (Local identifier code or number of collection.)
Field: **Notes** (Notes pertaining to collection.)
Content standards: Conforms to RSLPDEG.
Field: **PhysicalCharacteristics** (Number and type of items constituting collection.)
Content standards: Conforms to RSLPDEG.
Field: **Sources** (Note of sources of information.)
Field: **Title** (Title of collection.)
Content standards: Conforms to RSLPDEG. Omit initial articles.
- Table: **CollectionClassScheme** (Notes of usage of Classification schemes in SCURL collections.)
Field: **Edition** (Edition of classification scheme.)
Field: **Notes** (Notes about use of classification scheme for collection.)
- Table: **CollectionSource**
Field: **Expansion** (Full source of collection information.)
- Table: **CollectionSubjectScheme** (Notes of usage of Subject heading schemes in SCURL collections.)
Field: **Notes** (Notes about use of subject scheme for collection.)
- Table: **Collects** (Agent:Collects:Collection relationship.)
Field: **LegalStatus** (Legal status of collecting activity.)
- Table: **ContractsWith** (Agent:Contracts-with:Agent relationship.)
Field: **ContractDate** (Year of contract.)
Field: **ContractTerms** (Terms of contract.)
- Table: **Country** (Countries.)
Field: **Code** (Code for country.)
Content standards: Conforms to RSLPDEG. ISO 3166.
Field: **Name** (Name of country.)
- Table: **DateRange** (Years of start and end of accrual and coverage periods.)
Field: **DateEnd** (End of date range.)
Field: **DateStart** (Start of date range.)
- Table: **DateRangeType** (Types of date ranges.)
Field: **Type** (Type of date range.)
Content standards: Values: Accumulation - Contents
- Table: **DelegatesTo** (Agent:Delegates-to:Agent relationship.)
Field: **DelegationDate** (Year of delegation.)
Field: **DelegationTerms** (Terms of delegation.)

¹⁸ CLDT enumerated list of collection types. URL: <http://www.ukoln.ac.uk/metadata/rslp/types/>

Table: **Glossary** (Definitions of terms and acronyms.)

Field: **Definition** (Definition of glossary term.)

Field: **Term** (Glossary term.)

Table: **GlossarySource** (Sources of term definitions.)

Field: **Description** (Description of glossary source.)

Table: **HasPartAgent** (Agent:Has-Part:Agent relationship.)

Field: **Rank** (SLIR rank of child agent.)

Table: **HasPublication** (Collection:Has-Publication:Publication relationship.)

Field: **Citation** (Citation of publication.)

Table: **HoldsRightsTo** (Agent:Holds-Rights-to:Collection relationship.)

Field: **TransferNature** (Nature of transfer of rights.)

Field: **TransferTerms** (Terms of transfer of rights.)

Table: **IsLocatedIn** (Collection:Is-Located-in:Location relationship.)

Field: **Date** (Date of placement of collection in location.)

Table: **LMS** (Library management systems.)

Field: **Name** (Name of library management system)

Field: **RootName** (Root of CAIRNS filename.)

Table: **LMSSupplier** (Suppliers of library management systems.)

Field: **Name** (Name of supplier.)

Field: **WebsiteURL** (URL of website of supplier.)

Table: **Location** (Location entities.)

Field: **Name** (Name of location.)

Content standards: Conforms to RSLPDEG.

Table: **LocationPhys** (Physical locations.)

Field: **Address1** (First line of address of location.)

Field: **Address2** (Second line of address of location.)

Field: **Address3** (Third line of address of location.)

Field: **Postcode** (Postcode of location.)

Field: **TransportNote** (Note of transportation links to location.)

Table: **LocationVirt** (Virtual or electronic locations.)

Field: **Eaddress** (Electronic address of location.)

Field: **Notes** (Notes about location.)

Table: **MetaSchema**

Field: **Description** (Description of metadata schema.)

Table: **Miniclump** (Static sub-sets of CAIRNS searches defined by target and index.)

Field: **Description** (Description of miniclump.)

Field: **Title** (Title of miniclump.)

Table: **Owns** (Agent:Owns:Collection relationship.)

Field: **AccessCharges** (Note of access charges levied by owner.)

Field: **LegalStatus** (Note of legal status of ownership.)

Content standards: Conforms to RSLPDEG.

Field: **Maintenance** (Note of maintenance of collection.)

Table: **RCOLevel** (Subject strengths of Research of Collections Online.)

Field: **ConspectusLevel** (Conspectus level.)

Table: **RCOSubject** (Subject headings of Research of Collections Online.)

Field: **SubjectName** (Heading of RCO subject.)

Field: **SubjectNameOriginal** (Original name of subject.)

Table: **RCOSubjectGroup1** (Top-level of hierarchy of subject headings of Research Collections Online.)

Field: **GroupName** (Name of subject group.)

Table: **RCOSubjectGroup2** (Middle-level of hierarchy of subject headings of Research Collections Online.)

Field: **GroupName** (Name of subject group.)

Table: **Region** (Regions of countries.)

Field: **Name** (Name of region.)

Content standards: OS Gazetteer.

Table: **SaleNatureType** (Categorization of types of sale.)

Field: **SaleNature** (Nature of sale.)

Content standards: Values: Sale. - Donation. - Bequest.

Field: **SaleNatureNote** (Note of nature of sale.)

Table: **SellsTo** (Agent:Sells-to:Agent)

Field: **Notes** (Notes about sale.)

Field: **SaleDate** (Date of sale.)

Content standards: Year.

Field: **SaleRights** (Rights associated with sale.)

Field: **SaleTerms** (Terms of sale.)

Table: **Subject** (Subjects)

Field: **DDC21** (Dewey Decimal Classification edition 21 number of collection subject.)
Content standards: DDC.

Field: **DDC21Verbal** (Verbal heading associated with DDC21 number of subject.)
Content standards: DDC.

Field: **LCSH** (Library of Congress Subject Heading of collection subject.)
Content standards: LCSH.

Field: **Notes** (Scope notes of subject.)

Table: **SWOPSubjectGroup** (Groups of governments as subjects defined by the Scottish Working Group on Official Publications.)

Field: **GroupName** (Name of subject group.)

Table: **Town** (Towns, villages and cities.)

Field: **Name** (Name of town)

Content standards: OS Gazetteer.

Table: **ZServerID** (Index of CAIRNS Z39.50 servers)

Field: **HoldingsNotes** (Notes about holdings display.)

Field: **RootCode** (Code for root of Z server filenames.)

Field: **ZServerIP** (IP address of Z server.)

Field: **ZServerPort** (Port number of Z server.)