Reporting Database Guide v6.4.0

Contents

8 Frequently Asked Questions

1 Introduction

This document describes the organisation, structure and layout of the Symplectic Elements reporting database. Use this document as a data reference when designing your reports.

For an overview of the Symplectic Elements reporting framework and guidance on how to create and maintain your Symplectic Elements reporting database, see the Reporting Database Administration guide.

For an introduction to generating reports from your reporting database using Microsoft SQL Server Reporting Services see the How to set up and create custom SSRS reports in Elements guide.

2 Privacy and Data Protection in the Reporting Database

Elements' Reporting Database includes data that should be treated as private. It is the responsibility of each client and data consumer to ensure that they use Elements in a way that:

- respects users' privacy
- respects users' choices about their data
- complies with applicable privacy and data protection law
- complies with their institution's privacy policy

As such, Reporting Database access should only be granted to competent individuals who have been made fully aware of their responsibilities to protect users' data.

Starting with Elements 6.2.0, a user can interact with an privacy settings in three ways:

- **Object-level privacy:** if permitted by system settings, a user can set the privacy level *of an object itself*. This option is only available when system settings have been configured to allow it, and to users linked to the object. Object privacy was introduced in Elements 6.2.0.
- **Relationship privacy:** a user can set the privacy level of their *relationship* with an object. Relationship privacy was available prior to Elements 6.2.0.
- **Field-level privacy:** for certain data fields, a user may choose a privacy level that applies specifically to that field. Notable examples are the data fields in a user's profile. For example, a user may have a privacy level of 'Public' for their profile as a whole, but a privacy level of 'Internal' for their teaching summary. Field-level privacy was available prior to Elements 6.2.0.

Where data is affected by multiple privacy levels, the most restrictive privacy level is the one that applies.

Please read **both** of the following support articles for a fuller overview of the subject:

- Introduction to Data Privacy and Personal Data in Elements
- Introducing Object Privacy (v6.2 Onwards)

In the Reporting Database, privacy levels are indicated using 'Privacy Level' columns, which store the privacy level that currently applies to an object, relationship or field. See 5.4 Privacy Level columns for details and examples of using these columns.

2.1 Privacy cascading

Elements uses an implied cascading privacy model, such that a less restrictive explicit privacy level (e.g. 'Public') can be set on data logically embedded within a more restricted context (e.g. 'Private'). You should treat such data as being of the more restrictive privacy level. In many cases, privacy level columns in the Reporting Database will indicate the *effective* (i.e. the most restrictive) privacy level; however, this is not guaranteed, as the following example shows.

Consider a grant and a publication that are related to each other and where the grant has a privacy level of 'Private', while the publication and the relationship both have a privacy level of 'Public':

```
SELECT  gpr.[Grant ID]
        ,g.[Privacy Level] AS "Grant Privacy Level"
        ,gpr.[Type] AS "Relationship Type"
        ,gpr.[Privacy Level] AS "Relationship Privacy Level"
        ,gpr.[Publication ID]
        ,p.[Privacy Level] AS "Publication Privacy Level"
FROM    [Grant Publication Relationship] gpr
        JOIN [Grant] g ON g.ID = gpr.[Grant ID]
        JOIN [Publication] p ON p.ID = gpr.[Publication ID]

/*
Grant | Grant   | Relationship | Relationship | Publication |
Publication
ID    | Privacy | Type         | Privacy      | ID          | Privacy
      | Level   |              | Level        |             | Level
------+---------+--------------+--------------+-------------+--------
-----
69128 | Private | Funds        | Public       | 55280       | Public
*/
```

In this case, although the relationship has privacy level 'Public', it must not be displayed publicly, because one of the objects involved in the relationship is private.

It is relatively easy to apply this principle consistently if you follow the rule that whenever checking a privacy level for a relationship or field, you should also check the privacy level of the user(s) and/or object(s) relating to the information.

2.2 Changes to User privacy in version 5.14.0

Starting with version 5.14.0, the User table columns [Is Public] and [Institutional Email Is Public] have been removed and replaced with the new columns, [Privacy Level] and [Institutional Email Privacy Level] respectively. This brings user privacy reporting into line with other objects and fields, and allows access to multi-level privacy options such as Public/Internal/Private.

The following example shows how a simple query on the User table would need to be adapted following an upgrade to version 5.14 or beyond:

```
-- using [Is Public] and [Institutional Email Is Public] in the
[User] table
-- (versions 5.10.0 to 5.13.0 inclusive)
  SELECT  [Computed Name Full],
          CASE [Institutional Email Is Public]
            WHEN 1 THEN [Email]
            ELSE NULL
          END "Email"
  FROM    [User]
  WHERE   [Is Public] = 1
  ;

  -- using [Privacy Level] and [Institutional Email Privacy Level] in
the [User] table
  -- (version 5.14.0 onwards)
  SELECT  [Computed Name Full],
          CASE [Institutional Email Privacy Level]
            WHEN 'Public' THEN [Email]
            ELSE NULL
          END "Email"
  FROM    [User]
  WHERE   [Privacy Level] = 'Public'
  ;
```

2.3 Research Funding Solution data

Starting with Elements 6.2.0, the reporting database contains data relating to Research Funding Solution module. Due to the potentially sensitive nature of this data, it is stored under a dedicated `rfs` schema. This allows access to RFS data to be managed separately to the rest of the database. SELECT permission on the `rfs` schema, its tables and views should only be granted to users who have a genuine reason to access RFS data and who fully understand the sensitive nature of the data and their responsibility to use it appropriately.

In this guide, tables belonging to the `rfs` schema are indicated with RFS schema.

To help make the management of permissions easier, the reporting database has two user roles created by default:

- **elements-stock-reporting-consumer**
  Membership of this role grants SELECT permission on all tables and views in the `dbo` schema and the META_tblGlobal table of the `meta` schema.
- **elements-stock-rfs-reporting-consumer**
  Membership of this role grants all the permissions of the `elements-stock-reporting-consumer` role, plus SELECT permission on all tables and views in the `rfs` schema.

3 Conceptual Overview of Symplectic Elements

Before we discuss the structure of the reporting database, we present a conceptual overview of the data stored in the Symplectic Elements system itself, as understanding its concepts will inform how you report on them.

3.1 Objects and categories

The Elements database manages research **objects** and the **relationships** between them. Each object in Elements belongs to one of thirteen broad **categories**:

- Publications
- Grants
- Professional Activities
- Organisational Structures
- Projects
- Equipment
- Users
- Teaching Activities
- Funding Bodies
- Impact
- Assessment Supporting Information
- Journals
- Deposit Advice

A large number of possible relationships can exist between the objects in the system. For example, suppose Elements finds a publication P and thinks user U may be one of its authors; it will place the suggestion in U's pending publications list. When user U logs in and claims publication P, an "authored by" relationship is created from P to U. If U (or another user) then links publication P to a grant G, a "funds" relationship is created from G to P.

The following sections describe each of these broad categories.

3.1.1 Publications

Each publication is one of a number of types of publication defined by your institution. Example types are: artefact, book, book chapter, composition, conference proceeding, design, exhibition, internet publication, journal article, other, patent, performance, poster, report, scholarly edition, software/code, thesis/dissertation.

3.1.2 Grants

Grants are awards of, or applications for, funding.

3.1.3 Professional Activities

Each professional activity is one of a number of types of activity defined by your institution. Example types are: award, commercial spinoff, editorial board, external collaboration, external committee, fellowship, guest lecture, industrial connection, link with another academic body, membership of a professional body.

3.1.4 Organisational Structures

Each organisational structure object might represent a department or faculty in your institution, or a department or faculty within an external body, or might represent an external body itself.

3.1.5 Projects

A project object, like any other object, might share any number of relationships with other objects, some of which might represent grants that fund the project, or managers of the project.

3.1.6 Equipment

A piece of equipment might share relationships with projects and members of staff (users), or might be funded by grants.

3.1.7 Users

Each user object represents a user of the system, past or present. Your institution controls the list of users in the in a number of ways: manually, using the administrative tools available in the web application, and automatically, by providing user feeds through this API.

3.1.8 Teaching Activities

Each teaching activity is one of a number of types of teaching activity defined by your institution. Example types are: courses taught, courses developed, programs developed, course-based degree supervisions, graduate examinations, mentoring, research-based degree supervisions.

3.1.9 Funding bodies

Funding bodies are held within Elements as objects, but they are used solely as a reference list, and are not linked to any other objects.

3.1.10 Impact

Records of impact are the emerging evidence of research impact resulting from researchers' work, collected in the Impact module.

3.1.11 Assessment Supporting Information

Assessment Supporting Information is a category of object used to supplement the information collected in the Assessment module. Objects of this category are not intended to ever be visible outside of the context of an assessment exercise. Although it is stored in structures that are very similar to publications, grants and other public pieces of information, the data held within the category can be of a very sensitive nature.

As part of building an assessment exercise, a researcher may be asked to select research outputs into lists, and additionally supply information that has been defined as relevant by the administrator. This *supporting information* is stored in objects that are then attached to the assessment exercise, and/or the selected objects within it. The reuse of the Elements standard flexible object model allows institutions to tailor the requests for supporting information to specific needs.

3.1.12 Journals

Elements contains a journal object for each journal title, with a number of supporting journal records for information from each of the data sources for journal information. There is a single type of object within journal objects.

3.1.13 Deposit Advice

Elements supports institutional deposit advice which can be set at the journal level or for a group of journals from a specific publisher. There are two types of deposit advice, one for publisher deposit advice and one for journal advice, with the deposit advice linked to journal objects via the standard Elements linking mechanism.

3.1.14 Research Funding Opportunity `RFS schema`

In the Research Funding Solution, each funding round that is available to researchers is represented as a Research Funding Opportunity object.

3.1.15 Research Funding Proposal `RFS schema`

A Research Funding Proposal object represents a summary of proposed research, including details of collaborators, proposed dates, and budget (where relevant).

3.1.16 Research Funding Organisation `RFS schema`

A Research Funding Organisation object represents organisation related to a research funding opportunity or proposal; for example, a funder or collaborating institution.

3.2 Data Sources

Data for each category may come from many different sources:

- third-party sources such as *Dimensions*, *, PubMedScopus* or *Web of Science*
- a regular feed from an institutional data source
- imported data (e.g. from a legacy system)
- your institution's repository
- manually entered data
- certain datasets included with the Elements system (e.g. ERA journal lists)

Each category has a "Manual" data source to accommodate manually-entered data.

3.3 Records

An Elements object can store multiple records, one (or more) from each data source for its category. This means that each object contains within it all the available data from every source. For example, your institution might have the following publication data sources configured: *arXiv*, *DBLP*, Manual, *PubMed*, *Scopus*, and *Web of Science*. Each publication will then contain zero or more records sourced from each of them. All objects will have at least one record.

When you retrieve an object's data from your reporting database, you can choose which of its records best suits your needs. If you prefer the data from *PubMed*, you are free to use it, if it is present. For convenience, Elements will also choose a representative record for the object, based on data source **precedence** (see below).

3.4 Precedence

Storing multiple records for one object means that one record must be chosen as the **representative record** for the object. This is the record that will be displayed most prominently in Elements UI and reports. In the Reporting Database, the representative record is chosen by a **precedence list**. This is an ordered list of data sources; the record from the data source nearest the top of the list is chosen as the representative record. If you have System Admin rights in your Elements system, you can edit the reporting precedence list in Elements' user interface as follows:

1. Go to **System Admin > Data Source Management**
2. Scroll down to the 'Data source precedence' section and locate the appropriate list (Publications, Grants or Journals)
3. In the 'Precedence to edit' dropdown choose 'Reporting Tools'
4. Using the blue handles, drag and drop the data sources into your desired order. The top of the list has the highest precedence.
5. At the bottom of the list, click 'Update' to save your changes

Note that an object's representative record may be different in different contexts. Not only are there separate precedence lists for different Elements modules, each user may set their own **preferred record** for certain objects. These user preferences do not affect the Reporting Database representative record; they are, however recorded in user prefence tables for each category (see "User {Category} Preference tables").

3.5 Types

Each category (except users and funding bodies) distinguishes between one or more types of object within the category. For example, a publication object could be of type "book" or "journal article".

The definition of a type includes a complete specification of the fields stored in the database for each instance of the type, and your institution has a degree of control over the set of types for each category and the settings for each type definition.

Your institution might have decided to alter the definition of any of the types in the system, perhaps having added a new field called "Comments" to the patent type of publication, for example. All patents stored in the Elements system will then appear in a table your reporting database with a "Comments" field.

Each object type has an integer ID that is unique within the category to which it belongs.

If your institution makes changes to the type definitions in the Elements System, you may need to recreate your reporting database. Make sure you and your system administrator are in dialogue about any type changes planned by your institution.

3.6 Identifying objects

Each object has an ID assigned by the Elements System. This is referred to simply as the object's ID and is always an integer.

The value is persistent and unique only within the object's category, never changing or being reused by another object within the same category.

The category/ID pair is persistant and unique within the entire system, so the category/ID pair is the true unique identifier of the object. Because objects of different categories are stored in separate tables in the reporting database, the ID of the row in the various object tables is sufficient to identify the object.

Users can also be assigned a Proprietary ID by your institution (an institution-wide staff-id or human-resources-id). For users with a Proprietary ID, it is a string value unique amongst all users that have ever been assigned one - but not every user may have a Proprietary ID.

Each user is additionally assigned a username and authenticating authority pair, also assigned by your institution. The username is used by the user when logging into the system.

The records belonging to a publication are often sourced from external data sources such as the *Web of Science*, *PubMed* or *arXiv*. These records may have been assigned their own IDs by the external data sources. Where such an ID exists and has been stored by the Elements System, the reporting database stores it as the record's Proprietary ID in the record table.

3.7 Relationships

A relationship is a typed directed link from one object to another, which provides information about how the objects are related. No more than one relationship of each type may exist between any given pair of objects.

The relationship types provide the logical semantics of the Elements System's relational data storage.

An example relationship type is the "publication authorship" of a publication by a user. A relationship of this type is modelled in the system as a directed arrow of the appropriate type ID pointing from the publication to the user. This relationship indicates that the user is an author of the publication.

There are currently over 80 relationship types, each of which can be used to link an object of one specific category to an object of another specific category. For a comprehensive list of the relationship types, see the "Relationship Types" reporting database table.

Some example relationships initially configured in the system are: publication derives from publication, publication authored by user, grant funds organisational structure, grant funds publication, equipment used by user, user is PhD student of user, and many others.

Apart from having a type, a relationship may hold other information such as the dates between which the relationship was or is active.

Each relationship is assigned a unique integer ID by the Elements System.

3.8 HERDC

If your institution is using the Symplectic Elements HERDC module, your HERDC data will be available in the reporting database.

3.8.1 HERDC Return

An institution's annual HERDC exercise is represented by a HERDC return. A HERDC return contains a list of nominated publications, users that have authored nominated publications, their group affiliations and other data needed to submit a return.

3.8.2 HERDC Nomination

A HERDC nomination is the main entity within a HERDC return. Each nomination represents a publication that is nominated to be included in a HERDC return. It contains key bibliographic data needed to produce a return.

It also contains a list of users that have authored the nominated publication as well as additional data about authors' affiliations.

The data stored is used to calculate points on a per-author-group-affiliation basis, which simplifies creating points reports on either per-group or per-author levels.

4 Proper usage of the database

4.1 Consider the API for systems interop

The Reporting Database is primarily designed for the quick creation of reports and statistics, and for exporting bulk data from Elements. In contrast, the Elements API is primarily designed for systems interop; in particular it provides the ability to create and update metadata in Elements, which the Reporting Database does not. If you are in doubt over which to use for a particular application, please read the support article Should I use the API or the reporting database?

The following relative business benefits matrix compares the API with the reporting database:

Business benefit	API	Reporting Database
Stable interface for downstream systems	Yes	No
Faithfulness of data representation	Very high (normalised)	Medium (partially de-normalised)
Support for low latency, low bandwidth data synchronisation to other systems	Yes	No
Configurable security	Yes	Your responsibility
Robustness of availability	High	Your responsibility. Do not use while data is undergoing a full synchronisation.
Ease of setup	Requires a programmer	Anyone can manage it
Ease of customisation	Requires a programmer	Anyone comfortable with SQL
Ease of use of data	Requires a programmer	Anyone comfortable with SQL or reporting frameworks
Ease of access to data	Requires a programmer and configuration of Elements	High
Responsiveness to changes in Elements	High	Columns/tables will change according to data type definitions in Elements

4.2 You can access the data directly

In contrast to the Symplectic Elements system's application database, subject to the proper usage of the database outlined in this documentation you are free to access the tables and rows of data in the reporting database directly as you see fit, using SQL select commands.

Symplectic is not responsible for maintaining the overall performance of a Symplectic-hosted instance of Elements where usage of the reporting database is exceptionally high. Any undesired impact on an Elements system caused by such usage must be mitigated by employing a service bus architecture (synchronise the Elements Reporting Database data your systems require once to a central location, and distribute to client systems from there).

4.3 What not to alter

You must not:

- Alter any of the code in the database, including its stored procedure definitions;
- Alter the structure of any of the tables in the database, including adding, removing or altering any primary keys or constraints, or any triggers defined on the tables;
- Alter any of the data stored in the database

Doing any of the above breaches your licence for use of the Symplectic Elements product. Symplectic will not provide support for continued use of the reporting database until a new one is regenerated using the reporting database creation tool.

4.4 What you can alter

You are free to:

- Create new views in the database
- Create new tables in the database
- Create new stored procedures in the database that read data but do not modify it

If you do create any new views or stored procedures, prefix them all with a common tag that clearly isolates them from the stored procedures and views shipped by Symplectic. We advise using a custom schema for this purpose.

Please note that future upgrades and patches to Symplectic Elements will require you to rebuild your reporting database. Therefore, you must make sure that any changes you make to your reporting database can be easily reproduced on demand when a new reporting database is generated. Always maintain an up-to-date script that represents your changes, and this process will be easy.

4.5 Reloads and Rebuilds

The Reporting Database is continuously synchronised with the Elements operational database via the reporting synchroniser process. This means that most changes to Elements data will be reflected in the Reporting Database in a matter of seconds or minutes, depending on the current system load. This includes, for example, all changes to Publication data and links between objects. Certain less volatile kinds of data are synced less regularly, e.g. on an hourly schedule. An Elements system adminstrator can manage the reporting synchroniser in the user interface via **System Admin > Operations > Reporting Synchronisation**.

4.5.1 Reloads (full synchronisation)

Sometimes it is necessary to delete all data from the Reporting Database tables and reload it from scratch. This ensures that all data in the Reporting Database is up-to-date with the latest Elements data. To trigger this full synchronisation, click the "Reload all data from scratch" button. You will be asked to confirm the reload operation. Note that a full reload may take a considerable amount of time and system resources, so you should not trigger one during busy periods, or when other users or systems need access to the Reporting Database. Cases where a full reload is advisable include:

- Following changes to any of the data source precedence lists
- Following certain changes to the configuration file
  `Reporting.Synchronise.exe.config`

A full reload can also be scheduled to run regularly. The default schedule is to start a full reload at 00:07 every Saturday but you can adjust this to suit your system and your needs.

4.5.2 Rebuilds (structure synchronisation)

The data structure in your Elements system can be customised to your needs, e.g. by adding custom data fields and object types. Such data structure customisations typically require that new columns are added to some of the Reporting Database tables. In these cases, a full reload (i.e. data synchronisation) is not enough; instead all tables and views in the database must be dropped and then recreated using the new data structure. This is then followed immediately by a full reload using the structure.

In most cases, data structure synchronisation is not required and a full reload is enough. You should only use a rebuild if it is needed to accomodate data structure changes. In addition to dropping the standard tables, a rebuild will also drop any custom tables, views, functions or

procedures added to the Reporting Database, so ensure that you have scripts available to recreate these.

To trigger a rebuild, click the red "Rebuild the reporting database" button. You will be asked to confirm the rebuild operation.

4.5.3 Do not use the Reporting Database during a full reload

Do not use the reporting database while Symplectic Elements is performing a full synchronisation of its data into the reporting database.

You are at high risk of seeing empty or incomplete results sets during a full synchronisation and your queries may block the process of resynchronisation.

Liaise with the Symplectic Elements system administrator to see when full synchronisation runs are scheduled, and periodically check with the system administrator as to how long it takes to run these synchronisations in your environment. Alternatively, you can check yourself how long full synchronisations take, since the start and end of a full reporting synchronisation is logged within Elements, and reflected in the "System Log" table of the reporting database itself.

You will then know during what periods to prevent access to the database, by disabling 3rd party reporting tools and/or refraining from accessing the database directly.

You can also use the following query to check the current status of the Reporting Database. If it returns any value other than **available**, do not use the database:

```
SELECT  s.[Name] AS [Reporting Database Status]
FROM    meta.META_tblGlobal g
        JOIN meta.DEF_tblStatus s ON s.ID = g.Status_ID;
```

4.6 Security and sensitive data

Your institution may consider some of the data in the Symplectic Elements system to be sensitive. Typically, this consists of:

- HR data stored in the "user generic fields" in the Symplectic Elements system. This data can be found in the [User] table in the reporting database. In particular, your institution may use generic columns 11 to 50 inclusive for more sensitive data. These columns are not visible to Elements users (apart from system administrators) and are not available via the API without elevated privileges; however, they *are* exposed in the Reporting Database's User table. You should therefore consult your Elements system administrator as to which (if any) fields contain sensitive data and take measures to avoid exposing such data to unauthorised people and systems.
- Personal data stored in the various [User Record…] tables.

Note that many 3rd party reporting toolsets, such as Microsoft's SQL Server Reporting Services, offer comprehensive security settings within their report management tools that allow you to manage who has access to data, right down to the individual column level.

If your institution is hosting Elements, your database administrator can also achieve this manually.

Review the data available through the reporting database thoroughly before making it available to report managers.

As a reporting database administrator and/or consumer, it is also your responsibility to ensure that the privacy preferences of Elements users are respected. See Privacy and Data Protection in the Reporting Database and Privacy Level columns for details of how these privacy preferences are handled in the reporting database.

5 Reporting database structure

This section describes the structure of your reporting database.

Because the reporting database structure depends to a certain extent on the fields and types your institution has configured in the Symplectic Elements database, the exact structure of your reporting database may vary where indicated.

Conventions used in this section:

- {Category} is used as a placeholder for the names of the Elements object categories. When reading this guide, you may replace {Category} with an Elements category name, e.g. Publication, Grant, User, Teaching Activity, etc. Take care not to confuse the {Category} placeholder (in curly braces) with the [Category] table name (in square brackets).
- {Data Source} is used as a placeholder for the names of the various data sources. When reading this guide, you may replace {Data Source} with a data source name, e.g. Dimensions, PubMed, Web of Science, Manual, etc. Take care not to confuse the {Data Source} placeholder (in curly braces) with the [Data Source] table name (in square brackets) and `Data Source` as a column name.
- * is used in the name of child tables as a placeholder for the name of the parent table. For example, addresses are containing in many different child tables, all of which share the same structure (e.g. [Publication Record Address], [Publication Record Person Address], [User Record Degree Address] and many others). To avoid describing each child table individually, the [* Address] section describes the common structure. The portion of the table name substituted by * gives the name of the parent table.

5.1 List of tables and views

The following table lists all tables and views in the Reporting Database; you can use it to look up the relevant description in this guide.

Some of the views listed here existed as tables in previous versions of the Reporting Database. For SELECT statements, tables and views and equivalent, so your existing queries should not be affected, except where the columns have explicitly changed between versions.

Name	Schema	Type	See section
Address	dbo	Table	5.13.1 [Address]
Agent Type	dbo	Table	5.13.2 [Agent Type]
API Account	dbo	Table	5.13.3 [API Account]
Assessment Exercise	dbo	Table	5.13.4 [Assessment Exercise]
Assessment Exercise Attachment	dbo	Table	5.12.5 [* Attachment]
Assessment Exercise Definition	dbo	Table	5.13.5 [Assessment Exercise Definition]
Assessment Exercise Definition Field Setting Override	dbo	Table	5.12.16 [* Field Setting Override]
Assessment Exercise Definition REF Default Output Type Mapping	dbo	Table	5.13.6 [Assessment Exercise Definition REF Default Output Type Mapping]
Assessment Exercise Definition REF Output Submission Status	dbo	Table	5.13.7 [Assessment Exercise Definition REF Output Submission Status]
Assessment Exercise Definition Role Assignment	dbo	Table	5.13.8 [Assessment Exercise Definition Role Assignment]
Assessment Exercise Definition Scoreset	dbo	Table	5.12.40 [* Scoreset]
Assessment Exercise Definition Scoreset Score	dbo	Table	5.12.39 [* Score]
Assessment Exercise Definition Stage	dbo	Table	5.12.42 [* Stage]
Assessment Exercise Definition Stage Reviewable Component	dbo	Table	5.12.35 [* Reviewable Component]

Assessment Exercise Definition Stage Reviewer Assignment	dbo	Table	5.12.36 [* Reviewer Assignment]
Assessment Exercise Definition Stage Transition	dbo	Table	5.12.44 [* Transition]
Assessment Exercise Definition Tag	dbo	Table	5.12.43 [* Tag]
Assessment Exercise Definition Unit	dbo	Table	5.12.45 [* Unit]
Assessment Exercise Definition Unit Excluded Score Override	dbo	Table	5.13.9 [Assessment Exercise Definition Unit Excluded Score Override]
Assessment Exercise Definition Unit Manager	dbo	Table	5.12.23 [* Manager]
Assessment Exercise Definition Unit Membership	dbo	Table	5.12.46 [* Unit Membership]
Assessment Exercise Definition Unit Override	dbo	Table	5.12.47 [* Unit Override]
Assessment Exercise Definition Unit REF Research Group	dbo	Table	5.13.10 [Assessment Exercise Definition Unit REF Research Group]
Assessment Exercise Definition Unit REF2 Output Count Required	dbo	View	5.13.11 [Assessment Exercise Definition Unit REF2 Output Count Required]
Assessment Exercise Definition User	dbo	View	5.13.12 [Assessment Exercise Definition User]
Assessment Exercise Review	dbo	Table	5.12.34 [* Review]
Assessment Exercise Reviewer Status	dbo	Table	5.12.37 [* Reviewer Status]
Assessment Item	dbo	Table	5.13.13 [Assessment Item]
Assessment Item Attachment	dbo	Table	5.12.5 [* Attachment]
Assessment Item Definition	dbo	Table	5.13.14 [Assessment Item Definition]
Assessment Item Definition Unit Override	dbo	Table	5.12.47 [* Unit Override]
Assessment Item Review	dbo	Table	5.12.34 [* Review]
Assessment List	dbo	Table	5.13.15 [Assessment List]
Assessment List Attachment	dbo	Table	5.12.5 [* Attachment]
Assessment List Definition	dbo	Table	5.13.16 [Assessment List Definition]
Assessment List Definition Unit Override	dbo	Table	5.12.47 [* Unit Override]
Assessment List Review	dbo	Table	5.12.34 [* Review]
Assessment REF1 Researcher	dbo	Table	5.13.17 [Assessment REF1 Researcher]
Assessment REF1 Researcher Contract	dbo	Table	5.13.18 [Assessment REF1 Researcher Contract]
Assessment REF1 Researcher Contract No Research Connection Reason	dbo	Table	5.13.19 [Assessment REF1 Researcher Contract No Research Connection Reason]
Assessment REF1 Researcher Contract Research Group	dbo	Table	5.13.20 [Assessment REF1 Researcher Contract Research Group]
Assessment REF2 Output	dbo	Table	5.13.21 [Assessment REF2 Output]
Assessment REF2 Output Affiliated REF1 User	dbo	View	5.13.22 [Assessment REF2 Output Affiliated REF1 User]
Assessment REF2 Output REF1 Contribution	dbo	Table	5.13.23 [Assessment REF2 Output REF1 Contribution]
Assessment REF2 Output Type	dbo	Table	5.13.24 [Assessment REF2 Output Type]
Assessment Supporting Information	dbo	Table	5.9.1 [{Category}]
Assessment Supporting Information (Field	dbo	Table	5.3 (Field Display Names) tables

Display Names)			
Assessment Supporting Information Field	dbo	Table	5.8.2 [{Category} Field]
Assessment Supporting Information History	dbo	Table	5.9.2 [{Category} History]
Assessment Supporting Information Label	dbo	Table	5.12.21 [* Label]
Assessment Supporting Information Record	dbo	Table	5.9.4 [{Category} Record]
Assessment Supporting Information Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Assessment Supporting Information Source	dbo	View	5.8.3 [{Category} Source]
Assessment Supporting Information Type	dbo	Table	5.8.1 [{Category} Type]
Category	dbo	Table	5.13.25 [Category]
Claimed User Identifier	dbo	View	5.13.26 [Claimed User Identifier]
Collaboration Type	dbo	Table	5.13.27 [Collaboration Type]
Currency	dbo	Table	5.13.28 [Currency]
Data Source	dbo	Table	5.13.29 [Data Source]
Date	dbo	Table	5.13.30 [Date]
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Declined User Identifier	dbo	View	5.13.32 [Declined User Identifier]
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Delegate	dbo	Table	5.13.33 [Delegate]
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Deposit Advice (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
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Deposit Advice Label	dbo	Table	5.12.21 [* Label]
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Duplicate Funding Body Suggestion	dbo	Table	5.11.1 [Duplicate {Category} Suggestion]
Duplicate Grant Suggestion	dbo	Table	5.11.1 [Duplicate {Category} Suggestion]
Duplicate Impact Suggestion	dbo	Table	5.11.1 [Duplicate {Category} Suggestion]
Duplicate Journal Suggestion	dbo	Table	5.11.1 [Duplicate {Category} Suggestion]
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Duplicate Professional Activity Suggestion	dbo	Table	5.11.1 [Duplicate {Category} Suggestion]
Duplicate Project Suggestion	dbo	Table	5.11.1 [Duplicate {Category} Suggestion]
Duplicate Publication Suggestion	dbo	Table	5.11.1 [Duplicate {Category} Suggestion]
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Equipment (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Equipment Equipment Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment Field	dbo	Table	5.8.2 [{Category} Field]
Equipment Grant Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment History	dbo	Table	5.9.2 [{Category} History]
Equipment Impact Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment Label	dbo	Table	5.12.21 [* Label]
Equipment Manual Join Split History	dbo	Table	5.9.3 [{Category} Manual Join Split History]
Equipment Organisational Structure Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment Professional Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment Project Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment Record	dbo	Table	5.9.4 [{Category} Record]
Equipment Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Equipment Record Address	dbo	Table	5.12.2 [* Address]
Equipment Record Person	dbo	Table	5.12.29 [* Person]
Equipment Record Person Address	dbo	Table	5.12.2 [* Address]
Equipment Record Person Identifier	dbo	Table	5.12.19 [* Identifier]
Equipment Record Person Role	dbo	Table	5.12.38 [* Role]
Equipment Record Small Text	dbo	Table	5.12.41 [* Small Text]

Equipment Source	dbo	View	5.8.3 [{Category} Source]
Equipment Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Equipment Type	dbo	Table	5.8.1 [{Category} Type]
Equipment User Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
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Funding Body Grant Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Funding Body History	dbo	Table	5.9.2 [{Category} History]
Funding Body Label	dbo	Table	5.12.21 [* Label]
Funding Body Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
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Funding Body Record Address	dbo	Table	5.12.2 [* Address]
Funding Body Record Small Text	dbo	Table	5.12.41 [* Small Text]
Funding Body Record Web Address	dbo	Table	5.12.2 [* Address]
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Grant Grant Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Grant History	dbo	Table	5.9.2 [{Category} History]
Grant Impact Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Grant Label	dbo	Table	5.12.21 [* Label]
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Grant Organisational Structure Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Grant Professional Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Grant Project Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Grant Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Grant Record	dbo	Table	5.9.4 [{Category} Record]
Grant Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Grant Record Address	dbo	Table	5.12.2 [* Address]
Grant Record Identifier	dbo	Table	5.12.19 [* Identifier]
Grant Record Label	dbo	Table	5.12.21 [* Label]

Grant Record Person	dbo	Table	5.12.29 [* Person]
Grant Record Person Address	dbo	Table	5.12.2 [* Address]
Grant Record Person Identifier	dbo	Table	5.12.19 [* Identifier]
Grant Record Person Role	dbo	Table	5.12.38 [* Role]
Grant Source	dbo	View	5.8.3 [{Category} Source]
Grant Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
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Grant User Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
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HERDC Nomination Affiliation	dbo	Table	5.13.50 [HERDC Nomination Affiliation]
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Impact (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
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Impact Field	dbo	Table	5.8.2 [{Category} Field]
Impact History	dbo	Table	5.9.2 [{Category} History]
Impact Impact Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Impact Label	dbo	Table	5.12.21 [* Label]
Impact Organisational Structure Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Impact Professional Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]

Impact Project Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Impact Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
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Impact Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Impact Record Comment	dbo	Table	5.12.8 [* Comment]
Impact Record Person	dbo	Table	5.12.29 [* Person]
Impact Record Person Address	dbo	Table	5.12.2 [* Address]
Impact Record Person Identifier	dbo	Table	5.12.19 [* Identifier]
Impact Record Person Role	dbo	Table	5.12.38 [* Role]
Impact Source	dbo	View	5.8.3 [{Category} Source]
Impact Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Impact Type	dbo	Table	5.8.1 [{Category} Type]
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Institution	dbo	Table	5.13.59 [Institution]
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Journal (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
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Journal History	dbo	Table	5.9.2 [{Category} History]
Journal Label	dbo	Table	5.12.21 [* Label]
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Journal Record	dbo	Table	5.9.4 [{Category} Record]
Journal Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Journal Record Address	dbo	Table	5.12.2 [* Address]
Journal Record ISSN	dbo	Table	5.12.20 [* ISSN]
Journal Record Label	dbo	Table	5.12.21 [* Label]
Journal Record Small Text	dbo	Table	5.12.41 [* Small Text]
Journal Source	dbo	View	5.8.3 [{Category} Source]
Journal Type	dbo	Table	5.8.1 [{Category} Type]
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Label Vocabulary	dbo	Table	5.13.61 [Label Vocabulary]
Link	dbo	Table	5.13.62 [Link]
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META_tblForeignKey	meta	Table	6 META and DEF tables
META_tblGlobal	meta	Table	6 META and DEF tables
META_tblProcedure	meta	Table	6 META and DEF tables
META_tblTable	meta	Table	6 META and DEF tables
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OA Policy	dbo	Table	5.13.64 [OA Policy]
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Organisational Structure (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
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Organisational Structure History	dbo	Table	5.9.2 [{Category} History]
Organisational Structure Label	dbo	Table	5.12.21 [* Label]
Organisational Structure Manual Join Split History	dbo	Table	5.9.3 [{Category} Manual Join Split History]
Organisational Structure Organisational Structure Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Organisational Structure Professional Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Organisational Structure Project Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Organisational Structure Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
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Organisational Structure Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
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Organisational Structure Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Organisational Structure Type	dbo	Table	5.8.1 [{Category} Type]
Organisational Structure User Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Pending Grant	dbo	View	5.10.2 [Pending {Category}]
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Pending User Identifier	dbo	View	5.13.65 [Pending User Identifier]
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Professional Activity (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Professional Activity Field	dbo	Table	5.8.2 [{Category} Field]
Professional Activity History	dbo	Table	5.9.2 [{Category} History]
Professional Activity Label	dbo	Table	5.12.21 [* Label]
Professional Activity Manual Join Split History	dbo	Table	5.9.3 [{Category} Manual Join Split History]
Professional Activity Professional Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Professional Activity Project Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Professional Activity Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Professional Activity Record	dbo	Table	5.9.4 [{Category} Record]
Professional Activity Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Professional Activity Record Address	dbo	Table	5.12.2 [* Address]
Professional Activity Record Identifier	dbo	Table	5.12.19 [* Identifier]
Professional Activity Record Person	dbo	Table	5.12.29 [* Person]
Professional Activity Record Person	dbo	Table	5.12.2 [* Address]

Address			
Professional Activity Record Person Identifier	dbo	Table	5.12.19 [* Identifier]
Professional Activity Record Person Role	dbo	Table	5.12.38 [* Role]
Professional Activity Record Role	dbo	Table	5.12.38 [* Role]
Professional Activity Source	dbo	View	5.8.3 [{Category} Source]
Professional Activity Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Professional Activity Type	dbo	Table	5.8.1 [{Category} Type]
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Project (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Project Field	dbo	Table	5.8.2 [{Category} Field]
Project History	dbo	Table	5.9.2 [{Category} History]
Project Label	dbo	Table	5.12.21 [* Label]
Project Manual Join Split History	dbo	Table	5.9.3 [{Category} Manual Join Split History]
Project Project Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Project Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Project Record	dbo	Table	5.9.4 [{Category} Record]
Project Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Project Source	dbo	View	5.8.3 [{Category} Source]
Project Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Project Type	dbo	Table	5.8.1 [{Category} Type]
Project User Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Publication	dbo	Table	5.9.1 [{Category}]
Publication (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Publication Collaboration Type	dbo	Table	5.12.7 [* Collaboration Type]
Publication Country	dbo	Table	5.12.9 [* Country]
Publication External User Account Item	dbo	Table	5.12.15 [* External User Account Item]
Publication Field	dbo	Table	5.8.2 [{Category} Field]
Publication History	dbo	Table	5.9.2 [{Category} History]
Publication Label	dbo	Table	5.12.21 [* Label]
Publication Manual Join Split History	dbo	Table	5.9.3 [{Category} Manual Join Split History]
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Publication OA Policy Exception	dbo	Table	5.12.27 [* OA Policy Exception]
Publication OA Policy Exclusion	dbo	Table	5.12.28 [* OA Policy Exclusion]
Publication OA Policy Non-Compliance Reason	dbo	Table	5.12.25 [* Non-Compliance Reason]
Publication Publication Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Publication Record	dbo	Table	5.9.4 [{Category} Record]

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Publication Record Address	dbo	Table	5.12.2 [* Address]
Publication Record Country	dbo	Table	5.12.9 [* Country]
Publication Record File	dbo	Table	5.12.17 [* File]
Publication Record Grant Reference	dbo	Table	5.12.18 [* Grant Reference]
Publication Record Identifier	dbo	Table	5.12.19 [* Identifier]
Publication Record Label	dbo	Table	5.12.21 [* Label]
Publication Record Person	dbo	Table	5.12.29 [* Person]
Publication Record Person Address	dbo	Table	5.12.2 [* Address]
Publication Record Person Identifier	dbo	Table	5.12.19 [* Identifier]
Publication Record Person Role	dbo	Table	5.12.38 [* Role]
Publication Record Small Text	dbo	Table	5.12.41 [* Small Text]
Publication REF OA Policy	dbo	Table	5.12.26 [* OA Policy]
Publication Source	dbo	View	5.8.3 [{Category} Source]
Publication Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Publication Type	dbo	Table	5.8.1 [{Category} Type]
Publication User Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
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Research Funding Lookup Address Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Contact Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Currency	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Opportunity Access Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Opportunity Status	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Organisation Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Proposal Master Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Proposal Organisation Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Proposal Outcome	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Proposal Status	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Proposal Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Proposal Validation Stage	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Review Outcome	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Review Status	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Review Type	rfs	View	5.13.73 [Research Funding Lookup *]
Research Funding Lookup Value	rfs	Table	5.13.72 [Research Funding Lookup Value]
Research Funding Opportunity	rfs	Table	5.9.1 [{Category}]

Research Funding Opportunity (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Opportunity Field	rfs	Table	5.8.2 [{Category} Field]
Research Funding Opportunity History	rfs	Table	5.9.2 [{Category} History]
Research Funding Opportunity Label	rfs	Table	5.12.21 [* Label]
Research Funding Opportunity Record	rfs	Table	5.9.4 [{Category} Record]
Research Funding Opportunity Record (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Opportunity Record Custom Value	rfs	Table	5.12.10 [* Custom Value]
Research Funding Opportunity Record Small Text	rfs	Table	5.12.41 [* Small Text]
Research Funding Opportunity Research Funding Organisation Relationship	rfs	View	5.10.1 [{Category} {Category} Relationship]
Research Funding Opportunity Research Funding Proposal Relationship	rfs	View	5.10.1 [{Category} {Category} Relationship]
Research Funding Opportunity Source	rfs	View	5.8.3 [{Category} Source]
Research Funding Opportunity Type	rfs	Table	5.8.1 [{Category} Type]
Research Funding Organisation	rfs	Table	5.9.1 [{Category}]
Research Funding Organisation (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Organisation Field	rfs	Table	5.8.2 [{Category} Field]
Research Funding Organisation History	rfs	Table	5.9.2 [{Category} History]
Research Funding Organisation Label	rfs	Table	5.12.21 [* Label]
Research Funding Organisation Record	rfs	Table	5.9.4 [{Category} Record]
Research Funding Organisation Record (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Organisation Record Address	rfs	Table	5.12.2 [* Address]
Research Funding Organisation Record Custom Value	rfs	Table	5.12.10 [* Custom Value]
Research Funding Organisation Research Funding Organisation Relationship	rfs	View	5.10.1 [{Category} {Category} Relationship]
Research Funding Organisation Research Funding Proposal Relationship	rfs	View	5.10.1 [{Category} {Category} Relationship]
Research Funding Organisation Source	rfs	View	5.8.3 [{Category} Source]
Research Funding Organisation Type	rfs	Table	5.8.1 [{Category} Type]
Research Funding Proposal	rfs	Table	5.9.1 [{Category}]
Research Funding Proposal (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Proposal Field	rfs	Table	5.8.2 [{Category} Field]
Research Funding Proposal History	rfs	Table	5.9.2 [{Category} History]
Research Funding Proposal Label	rfs	Table	5.12.21 [* Label]
Research Funding Proposal Record	rfs	Table	5.9.4 [{Category} Record]
Research Funding Proposal Record (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Proposal Record Application Form	rfs	Table	5.12.3 [* Application Form]
Research Funding Proposal Record Application Form Data	rfs	Table	5.12.11 [* Data]

Research Funding Proposal Record Custom Value	rfs	Table	5.12.10 [* Custom Value]
Research Funding Proposal Record File	rfs	Table	5.12.17 [* File]
Research Funding Proposal Record Person	rfs	Table	5.12.29 [* Person]
Research Funding Proposal Record Person Address	rfs	Table	5.12.2 [* Address]
Research Funding Proposal Record Person Identifier	rfs	Table	5.12.19 [* Identifier]
Research Funding Proposal Record Person Role	rfs	Table	5.12.38 [* Role]
Research Funding Proposal Record Web Address	rfs	Table	5.12.2 [* Address]
Research Funding Proposal Research Funding Review Relationship	rfs	View	5.10.1 [{Category} {Category} Relationship]
Research Funding Proposal Source	rfs	View	5.8.3 [{Category} Source]
Research Funding Proposal Type	rfs	Table	5.8.1 [{Category} Type]
Research Funding Proposal User Relationship	rfs	View	5.10.1 [{Category} {Category} Relationship]
Research Funding Review	rfs	Table	5.9.1 [{Category}]
Research Funding Review (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Review Field	rfs	Table	5.8.2 [{Category} Field]
Research Funding Review History	rfs	Table	5.9.2 [{Category} History]
Research Funding Review Label	rfs	Table	5.12.21 [* Label]
Research Funding Review Record	rfs	Table	5.9.4 [{Category} Record]
Research Funding Review Record (Field Display Names)	rfs	Table	5.3 (Field Display Names) tables
Research Funding Review Record Address	rfs	Table	5.12.2 [* Address]
Research Funding Review Record Identifier	rfs	Table	5.12.19 [* Identifier]
Research Funding Review Record Role	rfs	Table	5.12.38 [* Role]
Research Funding Review Source	rfs	View	5.8.3 [{Category} Source]
Research Funding Review Type	rfs	Table	5.8.1 [{Category} Type]
Research Funding Review User Relationship	rfs	View	5.10.1 [{Category} {Category} Relationship]
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Teaching Activity	dbo	Table	5.9.1 [{Category}]
Teaching Activity (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Teaching Activity Field	dbo	Table	5.8.2 [{Category} Field]
Teaching Activity History	dbo	Table	5.9.2 [{Category} History]
Teaching Activity Label	dbo	Table	5.12.21 [* Label]
Teaching Activity Manual Join Split History	dbo	Table	5.9.3 [{Category} Manual Join Split History]
Teaching Activity Record	dbo	Table	5.9.4 [{Category} Record]
Teaching Activity Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
Teaching Activity Record Address	dbo	Table	5.12.2 [* Address]
Teaching Activity Record Identifier	dbo	Table	5.12.19 [* Identifier]
Teaching Activity Record Person	dbo	Table	5.12.29 [* Person]

Teaching Activity Record Person Address	dbo	Table	5.12.2 [* Address]
Teaching Activity Record Person Identifier	dbo	Table	5.12.19 [* Identifier]
Teaching Activity Record Person Role	dbo	Table	5.12.38 [* Role]
Teaching Activity Record Role	dbo	Table	5.12.38 [* Role]
Teaching Activity Source	dbo	View	5.8.3 [{Category} Source]
Teaching Activity Teaching Activity Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Teaching Activity Type	dbo	Table	5.8.1 [{Category} Type]
Teaching Activity User Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
User	dbo	Table	5.9.1 [{Category}]
User (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
User Assessment Supporting Information Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Deposit Advice Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Equipment Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Field	dbo	Table	5.8.2 [{Category} Field]
User Funding Body Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Grant Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Identifier	dbo	Table	5.13.76 [User Identifier]
User Impact Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Journal Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Label	dbo	Table	5.12.21 [* Label]
User Organisational Structure Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Photo	dbo	Table	5.12.31 [* Photo]
User Professional Activity Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Project Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Publication Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Record	dbo	Table	5.9.4 [{Category} Record]
User Record (Field Display Names)	dbo	Table	5.3 (Field Display Names) tables
User Record Academic Appointment	dbo	Table	5.12.1 [* Academic Appointment]
User Record Address	dbo	Table	5.12.2 [* Address]
User Record Certification	dbo	Table	5.12.6 [* Certification]
User Record Degree	dbo	Table	5.12.12 [* Degree]
User Record Degree Address	dbo	Table	5.12.2 [* Address]
User Record Degree Identifier	dbo	Table	5.12.19 [* Identifier]
User Record Degree Role	dbo	Table	5.12.38 [* Role]
User Record Email Address	dbo	Table	5.12.2 [* Address]
User Record Embeddable Media	dbo	Table	5.13.77 [User Record Embeddable Media]
User Record Language Competency	dbo	Table	5.12.22 [* Language Competency]
User Record Non-Academic Employment	dbo	Table	5.12.24 [* Non-Academic Employment]
User Record Phone Number	dbo	Table	5.12.30 [* Phone Number]
User Record Postgraduate Training	dbo	Table	5.12.32 [* Postgraduate Training]
User Record Postgraduate Training Address	dbo	Table	5.12.2 [* Address]

User Record Postgraduate Training Identifier	dbo	Table	5.12.19 [* Identifier]
User Record Postgraduate Training Role	dbo	Table	5.12.38 [* Role]
User Record Web Address	dbo	Table	5.12.2 [* Address]
User Research Funding Opportunity Preferences	rfs	Table	5.11.2 [User {Category} Preferences]
User Research Funding Organisation Preferences	rfs	Table	5.11.2 [User {Category} Preferences]
User Research Funding Proposal Preferences	rfs	Table	5.11.2 [User {Category} Preferences]
User Research Funding Review Preferences	rfs	Table	5.11.2 [User {Category} Preferences]
User Search Term Defaults	dbo	Table	5.13.78 [User Search Term Defaults]
User Search Term Overrides	dbo	Table	5.13.79 [User Search Term Overrides]
User Source	dbo	View	5.8.3 [{Category} Source]
User Teaching Activity Preferences	dbo	Table	5.11.2 [User {Category} Preferences]
User Type	dbo	Table	5.8.1 [{Category} Type]
User User Relationship	dbo	View	5.10.1 [{Category} {Category} Relationship]
Waiver Request	dbo	Table	5.13.80 [Waiver Request]
Web Address Type	dbo	Table	5.13.81 [Web Address Type]

5.2 Table descriptions

In this section, each table is described in the following way:

Name: the name of the table or group of tables.

Description: what the table represents.

Column definitions: a table listing the columns of the table and their database types along with example values. You should assume that all columns are nullable except where indicated otherwise and except for primary key columns. Any columns already referenced in a standard column set will not be listed here.

Columns names in **bold**: these make up the primary key of the table.

Columns names in [square brackets]: see the individual description for these columns. Their names and even their presence may vary according to the table you are looking at or depending upon how your institution has defined its types and fields in the Symplectic Elements system.

5.3 (Field Display Names) tables

In Elements, an object's metadata is stored in a set of **underlying fields**, with the set of underlying fields being the same across all objects in a single category. For each object **type** within a category, each underlying field is mapped to a specific **field usage** relevant to that type. For example, the `publication-date` underlying field for publications may be used as `Publication date` for publications of type "journal-article" and "book"; `Presented date` for publications of type "poster"; as `Date awarded` for publications of type "thesis/dissertation"; and not at all for publications of type "performance". Note that when an underlying field is unused for a particular type, it may still contain data but the data will not be exposed for objects of that type.

In tables named [{Category} (Field Display Names)] and [{Category} Record (Field Display Names)] the object or record metadata is expressed using columns representing type-specific field display names, rather than the fixed underlying field names used in the [{Category}] and [{Category} Record] tables. For example, the Publication underlying field `abstract` is typically used as `Abstract` on some Publication types and as `Description` on others. In the [Publication (Field Display Names)] table the data in this field will be split across two columns, `Abstract` and `Description`; in contrast, the [Publication] table presents the same data in a

single `abstract` column.

To save space, (Field Display Names) tables are not described separately in this guide. Refer instead to the documentation for the corresponding [{Category}] or [{Category} Record] table.

5.4 Privacy Level columns

Many columns in the reporting database have a name that includes the text 'Privacy Level'. These columns indicate the selected privacy level for some piece of data. If the text 'Privacy Level' is preceded by the name of another column in the same table, the Privacy Level column reports the privacy level of the referenced column. If the column is simply called 'Privacy Level', it reports the privacy level for the entire row of data.

Possible values of these columns are:

Value	Meaning
Public	The referenced data has been marked as public by the owning user. You may freely expose it in public-facing systems.
Internal	The referenced data has been marked as internal by the owning user. You may expose this in systems internal to your institution but not in public-facing systems.
Private	The referenced data has been marked as private by the owning user. It must not be exposed internally or publicly (but it may still be used in anonymised, aggregated reports).
NULL	Used only when the value of the referenced data column is NULL.

> **N.B.** The possible values of this column may change as Elements' privacy framework grows. Please always review the latest documentation before upgrading.

It is important to note that the 'Privacy Level' columns only report the privacy level of the data - they do not manage a database user's access to the data in any way. It is the responsibility of the database user to apply the privacy levels, using them to filter the result set in a way that is appropriate for their use case.

To save space, this documentation does not list Privacy Level columns in table descriptions and will only mention them in special cases such as the User table.

5.4.1 Examples of Privacy Level columns in use

Example 1

Where the column name is simply `Privacy Level`, the privacy setting refers to the entire table row. The following example applies this to users, excluding users whose privacy level is set to 'Private':

```
SELECT   [Last Name]
        ,[First Name]
FROM     [User]
WHERE    [Privacy Level] <> 'Private'
```

The result set of this query will include identifying data (first and last names) about users with a privacy level of either 'Internal' or 'Public'. This would therefore be appropriate for an internal report but not for public-facing uses.

Example 2: privacy levels for an individual column

In any row of the [User Record] table, the `research-interests Privacy Level` column holds the privacy setting for the value of the `research-interests` column on the same row, as set by the user when editing their profile. If your query results are intended for a public audience and include the contents of the `research-interests` column, you should filter these so that only values with a privacy level of 'Public' are included.

The following example returns NULL for `research-interests` unless `research-interests Privacy Level` is set to 'Public':

```
SELECT  [User ID]
        ,CASE [research-interests Privacy Level]
             WHEN 'Public' THEN [research-interests]
             ELSE NULL
        END "Research Interests"
FROM    [User Record]
```

Example 3: multiple privacy levels

Note that multiple privacy level values may need to be considered when consuming data. You should always act in accordance with the most restrictive privacy level that applies. The following example considers three privacy level values for each user:

- The user's overall privacy level - if this is not 'Public', the user is excluded from the result set entirely.
- The user's privacy setting for their email address, which is indicated in the `[Institutional Email Privacy Level]` column of the [User] table
- The user's privacy setting for their full (postal) address, which is indicated in the `[Privacy Level]` column of the [User Record Address] table.

If the user's overall privacy level value is 'Public', they will be included in the result set. However, a public user's email address and full address may still be excluded (i.e. replaced with a NULL value), according to the privacy level setting for each individual value.

```
SELECT  u.[Last Name]
        ,u.[First Name]
        ,CASE u.[Institutional Email Privacy Level]
             WHEN 'Public' THEN u.[Email]
             ELSE NULL
        END AS "Email Address"
        ,ura.[Full Address]
FROM    [User] u
        JOIN [User Record] ur
             ON  u.[ID] = ur.[User ID]
        LEFT JOIN [User Record Address] ura
             ON  ur.[ID] = ura.[User Record ID]
             AND ura.[Privacy Level] = 'Public'
WHERE   u.[Privacy Level] = 'Public'
;
```

Here, filtering the email address is done using a CASE statement, as in example 2. Filtering the full address is done by using a LEFT JOIN to the child table [User Record Address] - when the join criteria (which include the privacy filter) produce zero matches, the LEFT JOIN returns a NULL value for the full address.

Example 4: object privacy and relationship privacy

Consider extracting a list of publication titles to be used in user's public profiles. For each user, we want to find the titles of publications to which they have a claimed authorship link. Because these lists are for public consumption, we must filter them so they do not expose any data with a privacy level other than 'Public'. For a title to be included in a user's profile, all three of the following must be true:

- The user's privacy level is 'Public'
- The publication's privacy level is 'Public'
- The authorship relationship between the two has a privacy level of 'Public'

It should be self-evident that the first two conditions are required. The third condition applies because the data is appearing publicly in a context that asserts the user's relationship to the publication. If the user has expressed a preference that their relationship with the publication

should not be made public, that preference must be respected and the publication must not be listed in their public profile.

```sql
SELECT  u.ID
        ,p.title
FROM    [User] u
        JOIN [Publication User Relationship] pur
            ON  pur.[User ID] = u.ID
                AND pur.[Property] = 'authors'
                AND pur.[Privacy Level] = 'Public'
        JOIN [Publication] p
            ON  p.ID = pur.[Publication ID]
                AND p.[Privacy Level] = 'Public'
WHERE   u.[Privacy Level] = 'Public'
;
```

To illustrate the difference between object privacy and relationship privacy, consider a publication with claimed authorship links to two different users.

Firstly, if the publication object itself has a privacy level of 'Private' or 'Internal', it must not be exposed publicly and cannot appear on the profile of either user, regardless of any other privacy levels. This is object privacy in action.

Secondly, consider the following case:

- the publication has privacy level 'Public'
- both users have privacy level 'Public'
- the authorship relationship between the publication and user A has privacy level 'Private'
- the authorship relationship between the publication and user B has privacy level 'Public'

This means that the publication's data *can* be exposed publicly, but not in a way that links it to user A. Therefore the publication must *not* appear on user A's public profile but *can* (and should) appear on user B's public profile. Note that the publication's data exposed on user B's profile may include user A's name, affiliation, ORCiD, and other identifying data taken directly from the publication's metadata; this data is a matter of public record and is not hidden by user A making their relationship with the publication private.

Note that the private relationship between the publication and user A does place *some* restrictions on how the publication's data can be displayed when it is shown in a public context. For example, it must not include a hyperlink to user A's profile, or be enriched with data inferred via the private relationship.

5.5 (cropped) columns

The reporting database contains many columns of type `nvarchar` containing Unicode text values.

Some of these columns are of limited size, reflecting the maximum size of the originating data values in the Elements system. For example, the "Proprietary ID" column of the [User} table is of type `nvarchar(100)`.

Other columns, such as the "Abstract" column of the [Publication] table, are of type `nvarchar(max)`, allowing very large text values to be stored.

However, some reporting tool frameworks (such as Crystal Reports) impose restrictions of their own when working with `nvarchar(max)` columns. To help you work around these problems, wherever an `nvarchar(max)` column exists in the reporting database, a partnering column of a similar name (the original column name with " (cropped)" appended) is also provided. This partnering column contains the same data value, but cropped to 200 characters.

For example, if a filter does not allow the use of `nvarchar(max)` you may filter on the cropped columns instead and then display the full data from the uncropped column.

For example, the `nvarchar(max)` "Abstract" column of the [Publication] table is partnered by an `nvarchar(200)` "Abstract (cropped)" column with the same data cropped to 200 characters.

To save space, the rest of this documentation makes no further reference to cropped columns.

5.6 Hash columns

Many tables in the reporting database contain 'Hash' columns. Hash columns contain the hash of a specific field and are used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection). Where this is the purpose of the column, the column is not included in the documentation. If the purpose of the Hash column differs from this, then the definition of the column will be included in the table description.

5.7 Category-specific tables

Many tables in the reporting database are specific to a particular category but share a common structure with similar tables in other categories. For simplicity, each group of similar tables is described only once, rather than describing each table individually. For example, the tables [Publication Record], [Grant Record], [Teaching Activity Record], etc. will all be covered in the [{Category} Record] section.

5.8 Tables that describe a category

Each of these tables describes some aspect of a category (as opposed to the objects within that category).

- [{Category} Type] - lists and describes the object types available within {Category}.
- [{Category} Field] - lists and describes the underlying fields available within {Category} and their usages across the {Category} types.
- [{Category} Source] - lists and describes the various data sources for {Category}.

5.8.1 [{Category} Type]

Each type table lists the object types registered in the system for one category. For example, the "Publication Type" table holds details about all of the publication types configured by your institution, such as the "journal article" and "conference proceeding" publication types.

Column	Type	Example value
ID	int	
Heading Lowercase Plural	nvarchar(100)	journal articles
Heading Lowercase Singular	nvarchar(100)	journal article
Heading Plural	nvarchar(100)	Journal articles
Heading Singular	nvarchar(100)	Journal article
Uses Reporting Date 1	bit	
Uses Reporting Date 2	bit	

ID

The ID of the type, unique within this category.

Heading Lowercase Plural, Heading Lowercase Singular, etc.

The various names of the type.

Uses Reporting Date 1

Not all types of object have a concept of Reporting Date 1, in which case the value for "Reporting Date 1" in the appropriate object able will be NULL. This value lets you know whether this type of object is able to have a "Reporting Date 1".

The Reporting Date 1 value is often configured your institution to represent a key date associated with the object, such as the publication date of a journal article or the award date of a patent.

See your system administrator for more information about what Reporting Date 1 represents for this type of object.

Reporting Date 2

Not all types of object have a concept of Reporting Date 2, in which case the value for "Reporting Date 2" in the appropriate object able will be NULL. This value lets you know whether this type of object is able to have a "Reporting Date 2".

Where a type uses both Reporting Date 2 and Reporting Date 1, together they often represent a date range relevant to the object, such as the date range during which an exhibition was open.

See your system administrator for more information about what Reporting Date 2 represents for this type of object.

5.8.2 [{Category} Field]

Each field table lists the configurable fields used by each type of object within a single category. For example, the [Publication Field] table lists the configurable fields used by the various types of publication.

Each configuration of an underlying field for a particular type is a **field usage**. A field usage is made up of several settings that govern the way the underlying field is displayed on objects of the given type, such as the display name to be used, the input type on the manual entry form, whether the field is mandatory in the manual entry form, etc.

Some fields usages will be common across many or all object types in a category (e.g. the publication underlying field `title` is typically used as "Title" across all publication types); other underlying fields will have various usages across object types (e.g. the publication underlying field `abstract` is typically used as either "Abstract" or "Description" depending on publication type). Some may have a single usage (e.g. the publication underlying field `patent-status` is typically used as "Patent status" on the "Patent" publication type and is unused on all other types, since it is not relevant to them), or no usages at all (e.g. the publication underlying field `references` has no usages in a freshly installed Elements system).

Each row in this table represents the usage of an underlying field by a single type of object. For example, one row might represent the use of the underlying `title` field by the "journal article" publication type, and another row might represent the use of the same underlying field by the "conference proceeding" publication type.

Because two types of object can use an underlying field in different ways (e.g. by showing a different display name for the field, such as the `parent-title` field being displayed as "Book Title" by the book chapter publication type, but as "Report Title" by the report publication type), it makes sense that each usage of the field by a type is represented as a separate row here.

Column	Type	Example value
{Category} Type ID	int	6
Underlying Field Name	nvarchar(200)	publication-status
Display Name	nvarchar(100)	Status
Edit Control	nvarchar(50)	Dropdown
Instruction	nvarchar(max)	Choose a value from the following publication statuses.
Is Deletable	bit	0
Is Mandatory	bit	0
Is UI Locked	bit	0
{Category} Type Name	nvarchar(100)	patent
Show in Summary	bit	0
Sort Position	int	17
Value Choice List	nvarchar(max)	Unpublished, Submitted, Accepted, In

		preparation, Published, Published online
Value Suggestion List	nvarchar(max)	(null)
Value Type	nvarchar(50)	Choice

{Category} Type ID

The integer ID of the object type for which the field usage is specified. This column's name depends upon which table you are looking at. For example, in the [Publication Field] table this is called `Publication Type ID`, and references `[Publication Type]`.ID.

Underlying Field Name

The name of the underlying field for which the field usage is specified. Together with `{Category} Type ID`, this indexes this table into the usages of the various underlying fields by the various object types in this category.

Display Name

This is the name displayed for the given underlying field in the Symplectic Elements user interface when viewing an object of the given type. This display name is also used as a column name in the appropriate (Field Display Names) tables for this category.

For example, suppose that you have edited the "journal-article" publication type so that its usage of the underlying field `title` has the display name "Article Title", you will see an `Article Title` column in the [Publication (Field Display Names)] and [Publication Record (Field Display Names)] tables, which will contain values of this field when the publication type is "journal-article".

Edit Control

Indicates what sort of user interface control is used to modify values of this field in the user interface.

Instruction

Provides optional help in the user interface for users modifying values for this field.

Is Deletable

Whether or not your system administrator is able to delete this field from the Symplectic Elements system. Not all fields are deletable, since some are required by the system to properly interoperate with various online data providers, and for other reasons. Fields created by your institution are deletable.

Is Mandatory

Whether or not a user must supply a value when editing a record of this type in the Symplectic Elements user interface. This does not mean that a value will always be present, since data can enter the system in different ways (e.g. through imports, or system interoperability) and because the value of this flag could have been changed since data was already imported.

Is UI Locked

Whether the field usage should be considered locked. Locked field usages cannot be edited in the website.

{Category} Type

This field's name depends upon which table you are looking at. For the "Publication Field" table, for example, this is the "Publication Type" column, and references the publication type in the "Publication Type" table by its name.

Show in Summary

Whether or not a value present in this field should form a part of the abbreviated summary of the object as displayed in various places in the Symplectic Elements user interface.

Sort Position

The ordinal position in which this field should appear when listed alongside all the other fields for this object type.

Value Choice List

If the Value Type of this field is "Choice", then this comma-separated list of values represents the restricted list of values for this field. The value of this field for instances of this object type must either be one of these values, or NULL.

Value Suggestion List

If the Value Type of this field is "List" and this column has a value, then this comma-separated list of values represents suggested values offered to users for this field. Although as a "List" field the field can hold a list of free text entries, the Symplectic Elements user interface only offers users editing the list this set of values to choose from, any subset of which can be entered into the list.

Value Type

This represents the type of value that the field stores. This type value is particular to the Symplectic Elements system and values of the field for instances of this object type are represented in your reporting in different ways:

- Lists are implemented as child tables or cross-tables.

Value Type	Represents	Values are stored in your reporting database using
Boolean	A true/false flag	A SQL `bit` column
Choice	A single choice from an explicit list of alternatives	A SQL `nvarchar(50)` column
Date	A complete date, a year and month, or a year only	Two separate columns each of SQL type int. The first column contains the full date in YYYYMMDD format. The second column (whose name is appended with "Precision ID") indicates the precision of the date. Precision ID can take on the values: 1 for full date; 2 for only a year and month; 3 for only the year.
DOI	A Digital Object Identifier	A SQL `nvarchar(max)` column
Funding acknowledgements	Information about the grants funding a publication	A SQL `nvarchar(max)` column
Integer	An integer value	A SQL `int` column
ISBN-10	An ISBN-10	A SQL `nvarchar(13)` column
ISBN-13	An ISBN-13	A SQL `nvarchar(17)` column
ISSN	An ISSN	A SQL `nvarchar(9)` column
Money	A value and a currency code	Two separate SQL columns, one of type `nvarchar(3)` and post-fix "Currency" containing an ISO currency code, and a column of type decimal with post-fix "Value"
Number	A decimal value	A SQL decimal(15,5) column

Pagination	A start page, end page and page count, each of which is optional	Three separate columns each of SQL type `nvarchar(25)`. The three columns are named after the underlying name of the field (or the display name in "(Field Display Name)" tables), with "Begin", "End" or "Count" appended as appropriate to store the parts of the pagination value that are present.
Text	A string value	A SQL `nvarchar(max)` column
URL	An internet URL	A SQL `nvarchar(500)` column

5.8.3 [{Category} Source]

These views on the [Data Source] table each list the data sources registered in the system for a single category. For example, the [Publication Source] table holds details about all of the publication data sources, such as the *Web of Science* and *Scopus* and their settings in the Symplectic Elements system.

Column	Type	Example value
ID	int	7
Description	nvarchar(250)	null
Is API Importable	bit	0
Name	nvarchar(100)	Scopus
Name Identifier	nvarchar(100)	scopus
Reporting Precedence	int	3

ID

The ID of the data source, unique within this category

Description

An editable description of the data source.

Is API Importable

A flag indicating whether records can be imported through the API as if from this data source.

Name

The display name of the data source.

Name Identifier

Unique name of the data source.

Reporting Precedence

For an object with multiple records, the reporting precedence value determines which record is included in the [{Category}] table as the "representative" record. The higher the value, the higher the precedence.

For example, if you would prefer to see *Web of Science* data in the [Publication] table in preference to *PubMed* or *Scopus* data, ask the system administrator to raise the reporting precedence of the *Web of Science* data source in the Symplectic Elements system to a higher precedence than the *PubMed* and *Scopus* data sources. The next time data is synchronised to the reporting database, any *Web of Science* record will take precedence over the others and be used to populate the column values in the [Publication] table. Remember that all of the records are available in the [Publication Record] table anyway. This setting just affects which record is the one whose values are also copied into the [Publication] table.

5.9 Category-specific tables that contain object metadata

5.9.1 [{Category}]

Each [{Category}] table holds the set of objects for that category. For example, the [Publication] table holds all publications, and the [User] table holds all users. There is one row per object, regardless of the number of records the object contains.

The following columns are always available in a [{Category}] table:

Column	Type	Example value
ID	int	53325
Created When	datetime	2013-09-15 01:56:14.337
Date Created In Elements	datetime	2013-09-15 01:56:14.333
Has Thumbnail	bit	1
Is Locked	bit	0
label hash	varchar(24)	NwbWgaFEBCR4OEfKWx9x5g==
Modified When	datetime	2017-05-11 14:23:52.739
Type	nvarchar(100)	Journal article
Type ID	int	5

ID

The ID of the object. This is unique within the category (this table).

Created When

The date and time that the **_representative record_** for this object was created in Elements.

> **N.B.** This is the creation time for the representative record, **not** the object itself. The creation time for the object is in the `Date Created In Elements` column.

Date Created In Elements

The date and time that the object was first created in Elements.

Has Thumbnail

This field indicates whether the object has an associated thumbnail or not. Files are not represented in the Reporting Database. The value will always be 0 for categories that do not support thumbnails.

Is Locked

When the representative record is a manual record, indicates whether this record is protected from modifications by users of the website. Value will be NULL if record cannot be locked (e.g. for non-manual records).

label hash

A hash of the labels attached to the object (i.e. the object's data in the corresponding [{Category} Labels] child table). This is used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection).

Modified When

The date and time at which the object was most recently modified.

Type

The name of the type of the object. See the corresponding [{Category} Type] table for a complete list of the types of object for this category.

Type ID

The integer ID of the object's type in the corresponding [{Category} Type] table.

5.9.1.1 Non-User table columns

With the exception of the User table, each [{Category}] table also has the following columns:

Column	Type	Example value
Computed Title	nvarchar(max)	Studying Autism in Context
Reporting Date 1	date	2017-12-31
Reporting Date 2	date	(null)
Reporting Dates Are Manually Managed	bit	0

Computed Title

The value held by the object's representative record for the field that is specified as the 'Title field' for the object's object type. This is the value that will be displayed as the object's title in the Elements user interface.

For many object types, the 'Title field' used will be `title` (for example, all Publication types in a default Elements system). In other places the 'Title field' varies. For example, some of the Professional Activity types in a default Elements system use a different 'Title field':

Professional Activity type	Title field (underlying field name)	Display name
Broadcast interview	title	Program
Committee membership	title	Committee name
Community service	service-type	Service type
Event administration	event-type	Event type
Institutional review	institution	Institution reviewed
Membership	institution	Society / Other organisation
Promotion / Tenure assessment	department	Department / Division

Reporting Date 1

This field is of type int, representing a date in YYYYMMDD format. Not all types of object have a concept of Reporting Date 1, in which case the value will be NULL. See the appropriate row for the object's type in the [{Category} Type] table to see if Reporting Date 1 is used for this object type.

The Reporting Date 1 value is often configured your institution to represent a key date associated with the object, such as the publication date of a journal article or the award date of a patent.

See your system administrator for more information about what Reporting Date 1 represents for this type of object.

Reporting Date 2

This field is of type int, representing a date in YYYYMMDD format. Not all types of object have a concept of Reporting Date 2, in which case the value will be NULL. See the appropriate row for the object's type in the [{Category} Type] table to see if Reporting Date 2 is used for this object type.

Where both Reporting Date 2 and Reporting Date 1 are used together, they usually represent a date range relevant to the object, such as the date range during which an exhibition was open.

See your system administrator for more information about what Reporting Date 2 represents for each type of object.

Reporting Dates Are Manually Managed

Indicates whether the reporting date(s) for this object are managed manually, or automatically by the system.

5.9.1.2 Included Record columns

For each category, **all of the columns of the corresponding [{Category]} Record] table are also included**. These are populated with the data from the representative record of the object, so that it can be queried conveniently, without using joins or subqueries to the [{Category} Record] table. See the 5.9.4 [{Category} Record] tables section for a description of those columns.

To express this, the [{Category}] tables include the following columns:

Column	Type	Example value
{Category} Source ID	int	3
Data Source	nvarchar(100)	Web of Science
Data Source Proprietary ID	nvarchar(100)	WOS:000298988100006
{Category} Record ID	int	151102
Records Imported From	nvarchar(max)	PubMed, Web of Science

{Category} Source ID

Elements' internal integer ID for the data source from which the representative record originates. References `[{Category} Source].ID`.

Data Source

The display name of the data source from which the representative record originates.

Data Source Proprietary ID

The ID of the representative record at its Data Source (as opposed to the Elements internal ID).

{Category} Record ID

Elements' internal integer ID for the representative record.

Records Imported From

A comma-delimited list of all data sources from which the records belonging to the object originated. The list includes the source of the representative record. Use the [{Category} Source] table to see the data sources associated with this category. To retrieve the records themselve, use the [{Category} Record] table.

This data can also be extracted from the [{Category} Record] table, but this column provides a ready and readable summary of what data is available for the object.

5.9.1.3 Exception for the Verification Status and Verification Comment columns

There is an exception to the rule that included record columns are populated by the representative record. The `Verification Status` and `Verification Comment` columns are always populated from a Manual record belonging to the publication, if one exists. This exception is made because verification only applies to Manual records, making it more useful to elevate its verification values to the [Publication] table instead of the (meaningless) verification values for a non-manual representative record.

If a Manual record does not exist in the publication, these values will be left NULL. If there is a single manual record, then the `Verification Status` and `Verification Comment` will be populated from that record. If there is more than one manual record in the publication, then the values will be chosen from the first record whose value of the `Verification Status` column matches the one of the following values, in the given order: "Unverified", "Queried", "Cannot Verify" or "Verified".

5.9.1.4 [Journal]

In addition to the standard {Category} table columns, the Journal table has the column listed below. The data structure of the Journal category is not editable; therefore there will be no custom underlying fields for this category.

Column	Type	Example value
Sherpa Romeo Data	nvarchar(max)	

Sherpa Romeo Data

An JSON document retrieved from the SHERPA/RoMEO service using the ISSN of this record. No interpretation of this data is supplied by Symplectic. See the SHERPA/RoMEO website for more details.

> **N.B.** By default, the reporting synchroniser leaves this column NULL, even when SHERPA/RoMEO data is available. To enable synchronisation of this column, locate the following lines in the file **Reporting.Synchronise.exe.config** and set **value="true"**:
>
> ```
>     <!--Whether to include full sherpa data as part of the
>  reporting sync-->
>     <add key="reporting-include-sherpa" value="false" />
> ```
>
> After saving the file, log in to Elements as a System Admin, go to **System Admin > Operations > Reporting Synchronisation** and start/stop Reporting Synchroniser to make the new setting take effect. Values will not appear in the `[Sherpa Romeo Data]` immediately. You may wish to perform a full reload to force the SHERPA/RoMEO data into the Reporting Database. See 4.5 Reloads and Rebuilds for details of the full reload operation.

5.9.1.5 [Publication]

The Publication table contains all of the standard {Category} table columns for non-user categories, including a column for each field read from the representative record (i.e. the most precedent record according to the Reporting Tools publication precedence list). In addition, it includes the following columns:

Column	Type	Example value
APA6 HTML Citation	nvarchar(max)	<p style="padding-left:0.5in;text-indent:-0.5in;">Hayes, L., Lewis, S., &amp; Newton-Wade, V. (2012). Batch Metadata Editing: a tutorial workshop.</p>
Author Licence	nvarchar(max)	CC BY-SA
Canonical Acceptance Date	date	2019-05-02

Canonical Acceptance Date Precision ID	int	1
Citation Count	int	14
Collections	nvarchar(max)	(null)
Combined Publication Date	date	2019-10-01
Combined Publication Date Precision ID	int	2
{Data Source} Citation Count	int	27
{Data Source} FCR	decimal(28,6)	7.570000
{Data Source} RCR	decimal(28,6)	5.490000
Flagged As Not Externally Funded	bit	0
Full Text Comment	nvarchar(max)	
Last Flagged As Grant Not Listed	datetime	2013-09-15 01:56:14.333
Library Status Display Name	nvarchar(20)	Full text requested
Library Status Last Requested When	datetime	2016-12-08 00:00:00.000
Library Status Last Updated When	datetime	2016-12-08 14:00:22.847
Library Status Note	nvarchar(max)	Library status changed to 'Full text requested' on 08/12/2016 by Connor MacLeod.
Library Status Type ID	int	1
oapolicyexception hash	varchar(24)	5zWA8VMiOCJfKP5AUqyq3Q==
oapolicyexclusion hash	varchar(24)	J9HM5PUqhEL1d5zW7H3BiO4==
Requested Embargo Date	date	2018-12-01
Reporting Publication Status	nvarchar(20)	Published online
Requested Embargo Status ID	int	5
RT1 OA Location	nvarchar(max)	https://europepmc.org/articles/PMC5104966
RT1 OA Location File Version	nvarchar(max)	Published version

APA6 HTML Citation

A constructed citation for the publication in APA6 style, HTML-formatted in readiness for use on public portal websites, etc.

Author Licence

For publications deposited to a repository **via RT1 only**, this is the re-use licence (if any) requested by the depositor at the time of deposit.

Canonical Acceptance Date

The date of acceptance as displayed in the OA Monitor. The first non-null Acceptance Date from the publication's records in default precedence order. Null if there are none.

Canonical Acceptance Date Precision ID

References [Date Precision].ID .

Citation Count

The publication's citation count, as given by the representative record. Many data sources do not give citation counts; this value will be NULL in these cases.

Because this citation count is taken from the most precedent source for each publication, the values may not give a fair comparison across publications. To get the citation count from a specific data source, use the appropriate {Data Source} Citation Count column instead.

Collections

A text list of the names of the collections this publication belongs to. Typically collection names will be those harvested from repository data sources such as *DSpace* or *Digital Commons*.

Combined Publication Date

The date of acceptance as displayed in the OA Monitor. The first non-null Acceptance Date from the publication's records in default precedence order. Null if there are none.

Combined Publication Date Precision ID

References `[Date Precision]`.ID .

{Data Source} Citation Count

This set of columns indicates the publication's citation count, as harvested from a particular data source. This information is already available in the `Citation Count` column for each individual record in the [Publication Record] table, but is duplicated here for convenience.

Note that citation data is not generally available from many of the data sources. Citation data should only currently be expected from the following sources:

- *Dimensions*
- *Dimensions for Universities*
- *Europe PubMed Central*
- *Scopus*
- *Web of Science*
- *Web of Science Lite*

The value of this column will be NULL if no citation count is currently known at the data source.

{Data Source} FCR

The Field Citation Ration of the publication, as harvested from a particular data source.

FCR is a citation-based measure of scientific influence of one or more articles. It is calculated by dividing the number of citations a paper has received by the average number received by documents published in the same year and in the same Fields of Research (FoR) category. Currently FCR is only harvested from *Dimensions*. This field exists at the object level to ensure that the FCR value is always surfaced regardless of precedence order.

For more about FCR see the Dimensions support article What is the FCR? How is it calculated?

{Data Source} RCR

The Relative Citation Ratio of the publication, as harvested from a particular data source. Currently, RCR is harvested only from *Dimensions* and *Dimensions for Universities*. These fields exist at the object level to ensure that the RCR value is always surfaced regardless of precedence order.

More about RCR:

- A brief description at metrics-toolkit.org
- (Hutchins, B.I., Yuan, X., Anderson, J.M. & Santangelo, G.M. (2015). Relative Citation Ratio (RCR): A new metric that uses citation rates to measure influence at the article level. https://doi.org/10.1101/029629

Flagged As Not Externally Funded

Whether or not the publication was flagged as not being externally funded.

Full Text Comment

For publications deposited to a repository **via RT1 only**, a text comment sent with the repository submission.

Last Flagged As Grant Not Listed

The most recent time at which this publication was flagged as not being linked to its funding grant due to its absence from the system.

Library Status Display Name

For clients using the OA Monitor to manage library-mediated deposits, a library status can be entered or edited from within the Publications in OA Policy screen within the OA Monitor. Statuses are: "Full text requested", "Full text received" and "Library Finished".

Library Status Last Requested When

The last requested date is captured from within the OA Monitor user interface.

Library Status Last Updated When

An automatically captured timestamp indicating when the library status was last updated by a user accessing the OA Monitor.

Library Status Note

A free-form text field to capture notes. By default, this is pre-populated for each change with text of the form "Library status changed to 'Full text requested' on 08/12/2016 by Connor MacLeod."

Library Status Type ID

The internal identifier for the library status for this publication, acting as a foreign key to the Library Status table.

oapolicyexception hash

A hash of the publication's OA policy exception data, useful for detecting changes. Any change in the publication's OA policy exclusions will result in a change in `oapolicyexclusion hash`, which can be used to trigger further action.

oapolicyexclusion hash

A hash of the publication's OA policy exception data, useful for detecting changes. Any change in the publication's OA policy exceptions will result in a change in `oapolicyexception hash`, which can be used to trigger further action.

Reporting Publication Status

Aggregates the available values of `publication-status` from all records for the publication, returning the "most published" value.

Requested Embargo Date

For publications deposited to a repository **via RT1 only**, the embargo date that was requested when this publication was deposited.

Note that this column needs to be used in conjunction with the "Requested Embargo Status ID" column. A NULL value does not necessarily imply that there is no knowledge about the embargo status of the publication.

> For RT2 connections, instead of using the "Requested Embargo" columns (which will be NULL), you should retrieve actual embargo data from the publication record harvested from the repository data source. This is done using:
>
> - the file-level "Embargo Release Date" and "Embargo Description" columns in the [Publication Record File] table; and/or
> - the record-level "embargo-release-date" and "is-embargoed" columns in the [Publication Record] table.

Requested Embargo Status ID

For publications deposited to a repository **via RT1 only**, an identifier for the Requested Embargo Status. This acts as a foreign key to the Embargo Status table.

See the section on the Embargo Status table for a detailed description of the values and how they should be interpreted in conjunction with the `Requested Embargo Date` column.

RT1 OA Location

For publications deposited to a repository **via RT1 only**, a URL of the publication in Open Access form. Note that for an RT1 connection, 'OA Location' is an object-level concept.

RT1 OA Location File Version

For publications deposited to a repository **via RT1 only**, the version of the file listed in `RT1 OA Location`.

> **N.B.** Before Elements version 5.8, the `RT1 OA Location` and `RT1 OA Location File Version` columns were called `OA Location` and `OA Location File Version` respectively. The RT1 prefix was added in version 5.8 to distinguish them from the `oa-location-url` and `oa-location-file-version` included record columns that are populated by RT2 repository integrations. If you have downstream systems that are dependent on these columns you will need to amend their queries to reflect these changes.

5.9.1.6 [User]

In addition to the standard [{Category}] table columns, the [User] table includes the following columns:

Column	Type	Example value
Admin Privacy Level	nvarchar(10)	Private
Admin Privacy Level Modified When	datetime	
Arrive Date	date	2015-08-23
Authenticating Authority	nvarchar(50)	ldap
Claimed	bit	1
Computed Name Abbreviated	nvarchar(100)	Dave Wallace
Computed Name Addressee	nvarchar(100)	Dr. Dave Wallace
Computed Name Alphabetical	nvarchar(100)	WALLACE, David J (Dave)
Computed Name Full	nvarchar(100)	Dr. David Wallace PhD.
Department	nvarchar(500)	Meteorology
Email	nvarchar(320)	d.wallace@institution.org
First Name	nvarchar(100)	David
Initials	nvarchar(15)	DJ
Institutional Email Admin Privacy Level	nvarchar(15)	
Institutional Email Admin Privacy Level Modified When	datetime	
Institutional Email User Privacy Level	nvarchar(15)	
Institutional Email User Privacy Level Modified When	datetime	
Is Academic	bit	1
Is Current Staff	bit	1
Is Local	bit	0
Is Login Allowed	bit	1

Is Student	bit	0
Known As	nvarchar(100)	Dave
Last Name	nvarchar(100)	Wallace
Leave Date	date	2018-01-25
photo hash	varchar(24)	vHuI3Z3LR7gtEjAfHW4WXA==
Position	nvarchar(500)	Researcher
Primary Group Descriptor	nvarchar(100)	Geography
Profile URL	nvarchar(1000)	
Public URL Path Fragment	nvarchar(50)	/meteorology/profile/wallace.david.j
Proprietary ID	nvarchar(100)	
Suffix	nvarchar(50)	PhD.
Title	nvarchar(50)	Dr.
Username	nvarchar(32)	dwallace
User Preferred First Name	nvarchar(100)	(null)
User Preferred Last Name	nvarchar(100)	(null)
User Privacy Level	nvarchar(10)	
User Privacy Level Modified When	datetime	
[Generic Field]	nvarchar(max)	

Admin Privacy Level

Display name for the privacy level override assigned to this user by an admin, e.g. "Private", "Public".

Admin Privacy Level Modified When

When [Admin Privacy Level] was last modified. Null if it has never been modified.

Arrive Date

This field is of type int, representing a date in YYYYMMDD format (e.g. 23 August 2015 would be written 20150823). It can be NULL, and captures when the user joined the institution.

Authenticating Authority

This value lets the Symplectic Elements system know which external system (or internal method) should be used to log the user in to the system.

Claimed

A flag that is set to 1 the first time a user logs into Elements (i.e. they "claim" their user account). It can also be set via the API.

Computed Name Abbreviated

A short form of the user's name, computed from HR name data and the user's preferred first and last names. Takes the form "Firstname Lastname", where:

Firstname is the first non-null value from the following fields:

1. User Preferred First Name
2. Known As
3. First Name

Lastname is the first non-null value from the following fields:

1. User Preferred Last Name

2. Last Name

Computed Name Addressee

The user's name in a form suitable for addressing correspondence, computed from HR name data and the user's preferred first and last names. Takes the form "Title Firstname Lastname"

Firstname and Lastname are computed in the same way as for Computed Name Abbreviated.

Computed Name Alphabetical

The user's name in a form suitable for alphabetical ordering, computed from HR name data and the user's preferred first and last names.

If User Preferred First Name is not NULL, this takes the form "LASTNAME, Firstname", where Firstname is User Preferred First Name. LASTNAME is computed as for Computed Name Abbreviated and capitalised.

Otherwise it takes the form "LASTNAME, Firstname M (Known As)", where M is the user's middle initials and Firstname is the first non-null value from the following fields:

1. Known As
2. First Name

Computed Name Full

The user's full name, computed from HR name data and the user's preferred first and last names. Excludes middle initials and includes title and suffix i.e. takes the form "Title Firstname Lastname Suffix". Firstname and Lastname are computed as for Computed Name Abbreviated.

Department

The user's department.

Email

The user's email address.

First Name

The user's first name.

Initials

The initials of the user, including the initial of the person's first name.

Institutional Email Admin Privacy Level

Display name for the overriding value for the user's institutional email privacy level set by the admin, e.g. "Private", "Public".

Institutional Email Admin Privacy Level Modified When

When [Institutional Email Admin Privacy Level] was last modified. Null if it has never been modified.

Institutional Email User Privacy Level

Display name for the value for the user's institutional email privacy level set by the user, e.g. "Private", "Public".

Institutional Email User Privacy Level Modified When

When [Institutional Email User Privacy Level] was last modified. Null if it has never been modified.

Is Academic

A setting used in the system to help make decisions about which users should automatically be queued for online data searches.

Is Current Staff

Whether or not the user is currently a member of staff at your institution.

Is Local

Whether the user's data is managed manually by system administrators (Is Local = 1) or through the automated HR Feed (Is Local = 0).

Is Login Allowed

A flag that can be set to disable the ability of the user to log into the system.

Is Student

Indicates whether or not the user is a student, as set via the HR feed or manual user record. The [IsStudent] HR flag can be used to customise certain aspects of Elements functions, e.g. the affiliation type sent to the user's ORCID account as part of the ORCID write integration ('employment' or 'education'). It can also be a useful filter when building reports and integrations.

Known As

Any alternative to the user's first name, by which they are generally known.

Last Name

The user's last name.

Leave Date

This field is of type int, representing a date in YYYYMMDD format. It can be NULL, and captures when the user left the institution.

photo hash

A hash of the user's data in the User Photo child table. This is used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection).

Position

The user's position in their department.

Primary Group Descriptor

The administrative group to which the user belongs. This determines many of the application settings for the user in the Symplectic Elements system. The user may belong to many groups, but this is the user's primary group.

Profile URL

The URL of the user's Elements profile page.

Proprietary ID

The ID assigned to the user by your institution.

Public URL Path Fragment

A URL Path Fragment used to construct a URL for the user profile on a public facing researcher profile, such as in the Discovery module.

Suffix

Any suffix appended to the user's name (PhD, MPhil, FRS etc.)

Title

The user's honorific title (Dr., Prof., Ms., Mr, etc.)

Username

Used by the user to log in to the Symplectic Elements system.

User Preferred First Name

The user's preferred first name, as entered via their Account Settings.

User Privacy Level

Display name for the user's privacy level override for their own user object.

User Privacy Level Modified When

When [User Privacy Level] was last modified. Null if it has never been modified.

[Generic Field]

This set of fields depends on how your system administrator has configured the system to store data about its users. A large number of custom named fields may appear in this table, their use, name and meaning determined by your institution. See your system administrator for more details about the "user generic field" columns.

Please note that some information in these columns may be considered sensitive HR data by your institution. You must take precautions to ensure that access to this data is suitably restricted.

5.9.1.7 Privacy and data protection in the User table: an example query

> **N.B.** Starting with Elements v5.14.0, the columns "Is Public" and "Institutional Email Is Public" have been removed and replaced with the new columns "Privacy Level" and "Institutional Email Privacy Level" respectively. This brings user privacy reporting into line with other objects and fields, and allows access to multi-level privacy options such as Public/Internal/Private. Queries accessing user data should be rewritten to use these new privacy columns.

The following example query uses the [Privacy Level] and [Institutional Email Privacy Level] columns to make sure that each user's privacy settings are respected.

The CASE clause ensures that a user's email address is only revealed when [Institutional Email Privacy Level] = 'Public' (a NULL value will be returned otherwise). The user's Last Name and First Name are still returned.

The WHERE clause entirely excludes a user unless [Privacy Level] = 'Public', thus ensuring that no information about them or their relationships are included in the result set.

```sql
SELECT  p.[Computed Title]
       ,u.[Last Name]
       ,u.[First Name]
       ,CASE u.[Institutional Email Privacy Level]
            WHEN 'Public' THEN u.[Email]
            ELSE NULL
        END "Email"
FROM    [Publication] p
        JOIN [Publication User Relationship] pur
            ON p.[ID] = pur.[Publication ID]
        JOIN [User] u
            ON u.[ID] = pur.[User ID]
WHERE   u.[Privacy Level] = 'Public'
```

5.9.2 [{Category} History]

For each category with a history table, the table represents a human readable log of interesting events that have occurred to the objects of the category. The Symplectic Elements system makes this log available to the users so that they can see who has done what with their publications and other research data recently.

Column	Type	Example value
ID	int	
{Category} ID	int	
Imported From Merged Item	bit	
Notes	nvarchar(max)	Verification status updated by the verification team for the following sources: Manual (Pending / Unverified);
Time	datetime	2009-02-24 15:09:08.190
User ID	int	

ID

The unique ID of the log entry.

{Category} ID

This field's name depends upon which table you are looking at. For the [Publication History] table, for example, this is the `Publication ID` column, and references `[Publication].ID` .

Imported From Merged Item

Whether or not this log entry at the time it was created actually applied to a different object, an object that was later merged into this object.

Notes

The main body of the log entry.

Time

The time of the event described by this log entry.

User ID

The ID of the user who performed the action described by this log entry. You can find this user by ID in the [User} table.

5.9.3 [{Category} Manual Join Split History]

This table holds the history of join and split operations performed manually on objects by Elements users. Note that only manual operations are recorded here; automatic merging by the Elements matching algorithm as records as harvested is not recorded in this table.

Column	Type	Example value
ID	int	203
Destination {Category} ID	int	69145
Operation	nvarchar(10)	Join
Source Publication ID	int	60907
Time	datetime	2020-05-12 15:34:49.743

ID

An integer ID for this row of the table.

Destination {Category} ID

In a Join operation, this is the ID of the object into which the records from the source object were merged.

In a Split operation, this is the ID of the new object that was created by the record that was split from the source object.

Operation

The type of operation. May be either "Join" or "Split".

Source {Category} ID

In a Join operation, this is the ID of the object that was merged into the destination object. After the operation, the object with this ID is deleted.

In a Split operation, this is the ID of the object from which a record was split.

Time

The data and time that the join or split operation took place.

5.9.4 [{Category} Record]

Each record table is named after one category and holds the set of records for that category. Each record belongs to one object in the same category. For example, the [Publication Record] table holds all publication records, and each row in the [Publication Record] table references a single parent row in the [Publication] table via the [Publication ID] column.

An object may have multiple records. In this case, each record will have one row in the appropriate [{Category} Record] table (in contrast to the corresponding [{Category}] table, which has exactly one row per object). For example, a Publication could have one record harvested from *PubMed*, one created manually, one imported via a custom data feed, and one harvested from an institutional repository; it would then have four rows in the [Publication Record] table and one row in the [Publication] table. The row in the [Publication] table will contain data taken from the record with the highest reporting precedence (the representative record) as well as other, object-level data.

The following columns are always available in a record table:

Column	Type	Example value
ID	Int	144690
Created When	datetime	2017-11-13 15:20:57.957
{Category} ID	int	53520

{Category} Source ID	int	3
Data Source	nvarchar(100)	Web of Science
Data Source Proprietary ID	nvarchar(100)	WOS:000298988100006
Is Locked	bit	0
Modified When	datetime	2017-09-15 01:56:14.333
Suspected Deleted At Source	bit	0

ID

This is the internal Elements record ID for the record. It is independent of the proprietary ID assigned by the source from which the data came.

Created When

The datetime when this record was created.

{Category} ID

The ID of the parent object in the corresponding [{Category}] table. Although there are no foreign key constraints in the Reporting Database, this can be used as a foreign key to reference the parent object.

For example, in the [Publication Record] table this is the `Publication ID` column; its value is the ID of the parent publication in the [Publication] table.

{Category} Source ID

The integer ID of the data source which populated this data. References `[{Category} Source].ID`.

Data Source

Identifies which data source the record was imported from. This corresponds to a row in the [{Category} Record] table for this category via its `Name` column.

Data Source Proprietary ID

This is the identifier of the record assigned to it by the data source.

Is Locked

On a manual record, indicates whether the record is protected from modifications by users of the website. Value will be NULL if record cannot be locked (e.g. for non-manual records).

Modified When

The date and time of the most recent modification of the record. **N.B.** This is the last modification time for metadata within this specific record only. The record's parent object may have been modified more recently than this.

Suspected Deleted At Source

Indicates whether Elements has evidence that metadata record has been deleted at the data source, for example, because an attempt to retrieve the record metadata from the source resulted in a 404 Not Found HTTP response.

All other columns

Almost all other columns in the table are dynamically created, typed and named at the time of creation of the database, with reference to the set of fields defined by your institution for all the types of object in this category at that time. Column names in the [{Category} Record] tables are generated from the name of the **underlying field** in Elements (in contrast, the [{Category} Record (Field Display Name)] tables generate column names from the field display names, which may vary across object types).

For example, if your institution has defined a field with display name `Title` for the "Journal Article" publication type, then you should expect to see a `Title` column in the [Publication Record (Field Display Names)] table in the reporting database, but a `title` (lowercase) column in the [Publication Record] table. For types of publication for which this field is not used, you should expected to see a NULL value in the corresponding [Publication Record (Field Display Names)] table column.

See the corresponding [{Category} Field] table for a complete listing of the field definitions from which many of the additional columns were generated.

Symplectic Elements ships with a default set of types and fields for each of the categories, which will be listed here. Please note that your institution may have altered these definitions, in which case any of the following definitions may no longer be accurate.

5.9.4.1 [Assessment Supporting Information Record]

The Assessment Supporting Information category is unusual in that it has no default metadata fields; all metadata fields are therefore custom fields, configured for a specific Elements instance. The Assessment Supporting Information Record table therefore contains the standard [{Category} Record] table columns, as well as columns representing the custom fields which are distinguished by the prefix "c-".

5.9.4.2 [Deposit Advice Record]

In addition to the standard [{Category} Record] table columns, the Deposit Advice Record table has the columns listed below, reflecting the underlying fields for the Deposit Advice category. If you have created custom underlying fields in the Deposit Advice category they will also be represented by columns in this table, distinguished by the prefix "c-".

To access the same data with column names that reflect field display names rather than underlying fields, use the [Deposit Advice Record (Field Display Names)] table.

Column	Type	Example value
embargo-months	int	6
guidance	nvarchar(max)	
title	nvarchar(max)	

embargo-months

The duration of the embargo period in months.

guidance

Guidance text displayed to the user when depositing items covered by this advice.

title

The title of the publisher deposit advice.

5.9.4.3 [Equipment Record]

In addition to the standard [{Category} Record] table columns, the Equipment Record table has the columns listed below, reflecting the underlying fields for the Equipment category. If you have created custom underlying fields in the Equipment category they will also be represented by columns in this table, distinguished by the prefix "c-".

To access the same data with column names that reflect field display names rather than underlying fields, use the [Equipment Record (Field Display Names)] table.

Column	Type	Example value
additional-name	nvarchar(max)	CCC
addresses	nvarchar(max)	
algorithm	nvarchar(max)	Bogosort
available-for-use	nvarchar(200)	Available for internal & external use
capabilities	nvarchar(max)	
coded-in	nvarchar(max)	Python
contact-email	nvarchar(max)	
contact-organisation	nvarchar(max)	
contact-phone	nvarchar(max)	
contacts	nvarchar(max)	
data-input	nvarchar(max)	XML
data-output	nvarchar(max)	CSV
description	nvarchar(max)	The computing department's IOP computing cluster.
developed-by	nvarchar(max)	
fee-for-service	bit	1
finish-date	date	
inventory-number	nvarchar(max)	
licence	nvarchar(max)	
manufacturers	nvarchar(max)	
model-number	nvarchar(max)	
name	nvarchar(max)	Central Computing Cluster
operating-system	nvarchar(max)	
protocol	nvarchar(max)	HTTPS
purpose	nvarchar(max)	
restrictions	nvarchar(max)	
service-fee-url	nvarchar(500)	http://computing.lilliput.edu/ccc/fees
start-date	date	
sub-type	nvarchar(max)	
training-available	bit	1
url	nvarchar(500)	https://computing.lilliput.edu/ccc/bogosort
version	nvarchar(max)	1.2

additional-name

Alternate equipment name. May include abbreviations or alternate spellings.

addresses

Location of this equipment.

available-for-use

Availability of a piece of equipment for internal and external uses. Values include: internal use, external use, not available, internal & external use.

algorithm

A text field that can be used to identify or describe the algorithm used by the software.

coded-in

The programming language used. Applicable for software based equipment.

capabilities

List of capabilities of a piece of equipment.

contact-email

Contact email relevant to a piece of equipment.

contact-organisation

Contact organisation relevant to a piece of equipment.

contact-phone

Contact phone numbers relevant to a piece of equipment.

contacts

Name of the primary person(s) responsible for the equipment. Contact and PI may be the same person.

data-input

Format of input data e.g. CSV, XML.

data-output

Format of output data e.g. CSV, XML.

description

Textual description of this piece of equipment.

developed-by

Person who developed or helped develop the equipment.

fee-for-service

Check if the provider charges a fee for the service.

finish-date

The date when the equipment was last available or removed from inventory.

inventory-number

The inventory number of this equipment.

licence

The licence of the equipment.

manufacturers

Organisation or person that created this equipment.

model-number

Equipment model number, which may be a name, number, or both.

name

The name of the equipment.

operating-system

The operating system of the equipment if applicable.

protocol

The protocol used by the equipment, e.g. the protocol used by a web service.

purpose

The purpose of the equipment.

restrictions

Any restriction on service availability based on a non-geographic factor, such as university or consortium affiliation, professional certification, or other factors.

service-fee-url

Web page showing pricing information.

start-date

The date when the equipment was made available or added to inventory.

sub-type

The type of equipment e.g. Computer, MRI scanner, Laser.

training-available

This field indicates whether training is available for a piece of equipment.

url

Web address of the resource.

version

The version of the equipment, e.g. the version number of a piece of software.

5.9.4.4 [Funding Body Record]

In addition to the standard [{Category} Record] table columns, the Funding Body Record table has the columns listed below, reflecting the underlying fields for the Funding Body category. The data structure of the Funding Body category is not editable; therefore there will be no custom underlying fields for this category.

To access the same data with column names that reflect field display names rather than underlying fields, use the [Funding Body Record (Field Display Names)] table.

Column	Type	Example value
addresses	nvarchar(max)	Wellcome Trust, 215 Euston Road, London NW1 2BE
alt-title	nvarchar(max)	

end-date	date		
grant-codes	nvarchar(max)		
oa-conditions	nvarchar(max)	All research articles supported in whole or in part by Wellcome must be (a) made freely available through PubMed Central (PMC) and Europe PMC by the official final publication date, and (b) published under a Creative Commons attribution licence (CC-BY). https://wellcome.ac.uk/funding/guidance/open-access-policy	
oa-deposit-deadlines	nvarchar(max)		
oa-deposit-doc-types	nvarchar(max)		
oa-deposit-locations	nvarchar(max)	PubMed Central; Europe PubMed Central	
oa-file-formats	nvarchar(max)		
oa-mandate	nvarchar(max)		
oa-versions	nvarchar(max)		
start-date	date	1936-01-01	
title	nvarchar(max)	Wellcome Trust	
url	nvarchar(500)	https://wellcome.ac.uk	

addresses

Address associated with this funding body.

alt-title

An alternative title for the funding body.

end-date

The date this funder ceased to be relevant.

grant-codes

Grant codes associated with this funder.

oa-conditions

Any Open Access conditions imposed by this funding body.

oa-deposit-deadlines

The deposit deadlines required by this funding body's Open Access policy.

oa-deposit-doc-types

The documents types to be deposited as required by this funding body's Open Access policy.

oa-deposit-locations

The deposit locations required by this funding body's Open Access policy.

oa-file-formats

The file formats that need to be deposited.

oa-mandate

A description of the Open Access mandates required.

oa-versions

The versions that need to be deposited.

start-date

The date this funder became relevant.

title

The title of the funding body.

url

Web address of the funding body.

5.9.4.5 [Grant Record]

In addition to the standard [{Category} Record] table columns, the Grant Record table has the columns listed below, reflecting the underlying fields for the Grant category. If you have created custom underlying fields in the Grant category they will also be represented by columns in this table, distinguished by the prefix "c-".

To access the same data with column names that reflect field display names rather than underlying fields, use the [Grant Record (Field Display Names)] table.

Column	Type	Example value
abstract	nvarchar(max)	Many organic molecules can adopt more than one solid crystalline form, including polymorphs which differ only in the arrangement of the molecules. This can be exploited in the development of new speciality materials with optimised physical properties such as non-linear optical coefficients or molecular electronics, but it can prove disastrous for quality control when the new form appears unexpectedly during production or storage, as has occurred for some pharmaceuticals.
addresses	nvarchar(max)	
amount	nvarchar(33)	GBP 946361
amount Currency	nvarchar(3)	GBP
amount Value	decimal	946361
application-date	date	
associated-identifiers	nvarchar(max)	
award-date	date	2007-11-13
department	nvarchar(max)	Chemistry
description	nvarchar(max)	
discipline	nvarchar(max)	
end-date	date	2012-09-30
funder-name	nvarchar(max)	Engineering and Physical Sciences Research Council (EPSRC)
funder-reference	nvarchar(max)	EP/F03573X/1
funder-type	nvarchar(max)	
funding-type	nvarchar(max)	
institution	nvarchar(max)	UCL
institution-reference	nvarchar(max)	
is-application	bit	

labels	nvarchar(max)	Chemical Structure; Materials Characterisation
programme	nvarchar(max)	
record-created-at-source-date	date	2007-11-17
Reporting Amount	nvarchar(33)	
Reporting Amount Currency	nvarchar(3)	GBP
Reporting Amount Value	decimal	946361
researchers	nvarchar(max)	Price, SL; Florence, AJ; Tocher, DA
scheme	nvarchar(max)	Standard Research
start-date	date	2008-04-01
status	nvarchar(max)	Announced
sterling-value	int	
sub-programme	nvarchar(max)	
title	nvarchar(max)	Control and Prediction of the Organic Solid State: Translating the Technology
url	nvarchar(500)	https://gow.epsrc.ukri.org/NGBOViewGrant.aspx?GrantRef=EP/F03573X/1

abstract

The abstract of the grant.

addresses

The list of addresses associated with this grant.

amount

The awarded amount including the currency.

amount Currency

The currency of the awarded amount.

amount Value

The awarded amount.

application-date

The date when the application was filed.

associated-identifiers

List of external identifiers (e.g. PubMed IDs) of publications that were created as a result of this grant.

award-date

The date when the grant was awarded.

department

The awarded department.

description

The description of the grant.

discipline

The research area the funding relates to.

end-date

The date when funding ended.

funder-name

The name of the funder.

funder-reference

The reference used by the funder to identify the grant.

funder-type

The type of the funder.

funding-type

The type of the funding.

institution

The awarded institution.

institution-reference

The reference used by the institution to identify the grant.

is-application

Whether the grant is at application stage or not.

labels

The labels associated with the grant.

programme

The programme the grants relates to.

record-created-at-source-date

The date that the metadata record was created *at the data source.*

Reporting Amount

The required reporting amount including currency.

Reporting Amount Currency

The currency of Reporting Amount.

Reporting Amount Value

The value of the Reporting Amount.

researchers

The list of researchers assotiated with the grant.

scheme

The funding scheme the grant relates to.

start-date

The date when the funding starts.

status

The status of the grant.

sterling-value

In older versions of Elements, this field was used to store the value of the grant in British Pounds. It it is now deprecated in favour of the "amount" field and is retained only for backward compatibility.

sub-programme

The sub-programme the grant relates to.

title

The title of the grant.

url

The URL of the grant.

5.9.4.6 [Impact Record]

Column	Type	Example value
external-contributors	nvarchar(max)	
title	nvarchar(max)	

external-contributors

The names of those that have contributed to the record of impact that are based outside of your organisation.

title

A working title for the record of impact.

5.9.4.7 [Journal Record]

In addition to the standard [{Category} Record] table columns, the Journal Record table has the columns listed below, reflecting the underlying fields for the Journal category. The data structure of the Journal category is not editable; therefore there will be no custom underlying fields for this category.

To access the same data with column names that reflect field display names rather than underlying fields, use the [Journal Record (Field Display Names)] table.

Column	Type	Example value
addresses	nvarchar(max)	United Kingdom
alternative-titles	nvarchar(max)	
cc-licence	nvarchar(max)	
end-year-oa	date	
era-2010-rank	nvarchar(200)	

five-year-impact-factor	decimal	
h-index	int	307
impact-factor	decimal	
keywords	nvarchar(max)	Developmental Biology
publication-fee	nvarchar(200)	
publisher	nvarchar(max)	Springer Nature
sjr	decimal	34.896000
snip	decimal	8.290000
start-year-oa	date	
submission-info-url	nvarchar(500)	https://mts-nrg.nature.com/cgi-bin/main.plex
title	nvarchar(max)	Nature Reviews Genetics

addresses

The list of addresses assotiated with this journal.

alternative-titles

The alternative title of this journal.

cc-licence

The Creative Commons license.

end-year-oa

The year when the journal ended open access publishing.

era-2010-rank

The rank of this journal in the ERA 2010 list. Only populated in journal records from the *Excellence in Research for Australia 2010* data source.

five-year-impact-factor

The average number of times articles from the journal published in the past five years have been cited in the JCR year. Produced by Clarivate Analytics, this is related to Journal Impact Factors.

h-index

A measure of the quality of the journal which can be calculated using data from *Web of Science*, *Scopus* or *Google Scholar*. https://en.wikipedia.org/wiki/H-index

impact-factor

A measure reflecting the yearly average number of citations of recent articles published in this journal.

keywords

The keywords associated with this journal.

publication-fee

The fee charged to authors to publish in this journal.

publisher

The publisher of the journal.

sjr

The *Scimago Journal Rank* of the journal.

snip

The *Source Normalized Impact per Paper* of the journal

start-year-oa

The year when the journal started open access publishing.

submission-info-url

The author submission guidelines URL.

title

The title of the journal.

5.9.4.8 [Organisational Structure Record]

In addition to the standard [{Category} Record] table columns, the Organisational Structure Record table has the columns listed below, reflecting the underlying fields for the Organisational Structure category. The data structure of the Organisational Structure category is not editable; therefore there will be no custom underlying fields for this category.

To access the same data with column names that reflect field display names rather than underlying fields, use the [Organisational Structure Record (Field Display Names)] table.

Column	Type	Example value
description	nvarchar(max)	
name	nvarchar(max)	Department of Chemistry
url	nvarchar(500)	http://your.institution/chemistry

description

A description of the organisational structure.

name

The name of the organisational structure.

url

A URL associated with the organisational structure.

5.9.4.9 [Professional Activity Record]

In addition to the standard [{Category} Record] table columns, the Professional Activity Record table has the columns listed below, reflecting the underlying fields for the Professional Activity category. If you have created custom underlying fields in the Professional Activity category they will also be represented by columns in this table, distinguished by the prefix "c-".

To access the same data with column names that reflect field display names rather than underlying fields, use the [Professional Activity Record (Field Display Names)] table.

Column	Type	Example value
administrative-role	nvarchar(200)	

amount	int	
assessment-type	nvarchar(200)	
awarded-amount	nvarchar(33)	
awarded-amount Currency	nvarchar(3)	
awarded-amount Value	decimal	
co-contributors	nvarchar(max)	
committee-role	nvarchar(200)	
competitive	bit	
country	nvarchar(200)	
department	nvarchar(max)	
description	nvarchar(max)	
distinction-type	nvarchar(200)	
employee-type	nvarchar(200)	
end-date	date	
event-end-date	date	
event-name	nvarchar(max)	
event-start-date	date	
event-type	nvarchar(200)	
institution	nvarchar(max)	
invited	bit	
keynote	bit	
location	nvarchar(max)	
membership-type	nvarchar(200)	
office-type	nvarchar(200)	
organisation	nvarchar(max)	
org-type	nvarchar(200)	
person	nvarchar(max)	
person Email	nvarchar(100)	
person First Initial	nvarchar(3)	
person First Name	nvarchar(50)	
person Last Name	nvarchar(50)	
person Middle Initials	nvarchar(11)	
person Middle Names	nvarchar(100)	
person Phone number	nvarchar(100)	
person Resolved User ID	int	
publication-type	nvarchar(200)	
review-type	nvarchar(200)	
service-role	nvarchar(200)	
service-type	nvarchar(200)	
start-date	date	
supervisory-role	nvarchar(200)	
title	nvarchar(max)	
url	nvarchar(500)	

administrative-role

The nature of the person's administrative role.

amount

The number of works reviewed or applications assessed, depending on Professional Activity type.

assessment-type

The nature of the assessment.

awarded-amount

The currency and the amount of the award.

awarded-amount Currency

The currency of the award.

awarded-amount Value

The amount of the award in the specified currency.

co-contributors

The names of any other persons who contributed to the Professional Activity.

committee-role

The nature of the person's role in the committee.

competitive

Indicates if participation in this event was competitive.

country

The name of the country in which the award was given.

department

The department within the given institution or organisation, except for Professional Activities of type "Broadcast interviews", where this is the name of the network under which the program is affiliated.

description

A description of the Professional Activity.

distinction-type

The nature of the award received (e.g. for Professional Activities of type "Distinction").

employee-type

The nature of the employee (e.g. for Professional Activities of type "Employee supervision").

end-date

The date on which the Professional Activity ended, if applicable. For example, the date a review was completed or a membership ended.

event-end-date

The date the event ended (e.g. for Professional Activities of type "Event administration").

event-name

The name of the event in which the person gave the presentation.

event-start-date

The date of the event, or the date the event began.

event-type

The nature of the event.

institution

The name of the institution where the Professional Activity took place, or to which it is affiliated, or for which it was conducted.

invited

Indicates whether the person was invited to perform the Professional Activity, except for Professional Activities of type "Employee supervision", where it indicates whether consent has been received to release the employee's name.

keynote

Indicates whether the Professional Activity was a keynote address.

location

Venue or location in which the Professional Activity took place, or the jurisdiction under which it fell.

membership-type

The nature of the membership.

office-type

The nature of the office held.

organisation

An organisation or organisations associated with the Professional Activity. The exact meaning varies depending on the type of Professional Activity. For details execute:

```sql
SELECT   f.[Underlying Field Name]
        ,t.[Heading Singular] "Professional Activity Type"
        ,f.[Display Name]
        ,f.[Instruction]
FROM     [Professional Activity Field] f
         INNER JOIN [Professional Activity Type] t
            ON  t.[ID] = f.[Professional Activity Type ID]
WHERE    [Underlying Field Name] = 'organisation'
ORDER BY f.[Professional Activity Type ID];
```

org-type

The nature of the given organisation.

person

The full name of a person associated with the Professional Activity. For example, the interviewer or supervised employee.

person Email

The email address of the person named in the 'person' field.

person First Initial

The first initial of the person named in the 'person' field.

person First Name

The first name of the person named in the 'person' field.

person Last Name

The last name of the person named in the 'person' field.

person Middle Initials

The middle initials of the person named in the 'person' field.

person Middle Names

The middle names of the person named in the 'person' field.

person Phone number

The phone number of the person named in the 'person' field.

person Resolved User ID

The Elements user ID of the person named in the 'person' field, if they have been successfully resolved to an Elements user.

publication-type

The nature of the publication (e.g. in which an editorial was published).

review-type

The nature of the review conducted.

service-role

The nature of the person's role in the service (e.g. for Professional Activities of type "Community Service").

service-type

The nature of the service (e.g. for Professional Activities of type "Community Service").

start-date

The date on which the Professional Activity started, if applicable. For example, the date a review or membership began. Where no end-date is given, this indicates the date on which the Professional Activity happened, e.g. the date an award or presentation was given.

supervisory-role

The nature of the supervisory role. (e.g. for Professional Activities of type "Employee supervision")

title

The title or name of the Professional Activity, or of a parent entity (e.g. the title of the publication in which an editorial appeared, or of the program for which an interview was conducted).

url

The name of an associated website, if applicable.

5.9.4.10 [Project Record]

In addition to the standard [{Category} Record] table columns, the Project Record table has the columns listed below, reflecting the underlying fields for the Project category. If you have created custom underlying fields in the Project category they will also be represented by columns in this table, distinguished by the prefix "c-".

To access the same data with column names that reflect field display names rather than underlying fields, use the [Project Record (Field Display Names)] table.

Column	Type	Example value
description	nvarchar(max)	
name	nvarchar(max)	Review of equipment budget 2009

Description

A description of the project.

Name

The name of the project.

5.9.4.11 [Publication Record]

In addition to the standard [{Category} Record] table columns, the Publication Record table has the columns listed below, reflecting the underlying fields for the Publication category. If you have created custom underlying fields in the Publication category they will also be represented by columns in this table, distinguished by the prefix "c-".

To access the same data with column names that reflect field display names rather than underlying fields, use the [Publication Record (Field Display Names)] table.

Column	Type	Example value
abstract	nvarchar(max)	The conventional interpretation of the one-loop effective potentials of the Higgs field in the Standard Model and the gravitino condensate in dynamically broken supergravity is that these theories are unstable at large field values. A PT-symmetric reinterpretation of these models at a quantum-mechanical level eliminates these instabilities and suggests that these instabilities may also be tamed at the quantum-field-theory level.
acceptance-date	date	2016-03-02
addresses	nvarchar(max)	
altmetric-attention-score	int	71
are-files-confidential	bit	
associated-authors	nvarchar(max)	Epitope I; Jones K
associated-identifiers	nvarchar(max)	dimensions-grant-id:grant.2465161, dimensions-grant-id:grant.5476235
Author Count	int	4

author-licence	nvarchar(200)	
authors	nvarchar(max)	Bender CM; Hook DW; Mavromatos NE; Sarkar S
author-url	nvarchar(500)	http://arxiv.org/abs/1506.01970v1
Citation Count	int	3
collections	nvarchar(max)	Collection 1.1
commissioning-body	nvarchar(max)	
confidential	bit	
confidential-files-reason	nvarchar(max)	
doi	nvarchar(300)	10.1088/1751-8113/49/45/45LT01
edition	nvarchar(max)	1
editors	nvarchar(max)	Burger DR; Goldstein AS
eissn	nvarchar(9)	1751-8121
embargo-release-date	date	2019-05-16
external-identifiers	nvarchar(max)	isidoc:EA2WG
field-citation-ratio	decimal(28,6)	20.320000
filed-date	date	
finish-date	date	
formatted-abstract	nvarchar(max)	
formatted-title	nvarchar(max)	Universal spectral behavior of <i>x²(ix)^ε</i> potentials
funding-acknowledgements	nvarchar(max)	
funding-acknowledgements Acknowledgement Text	nvarchar(max)	CMB and SS were supported by a Royal Society UK Travel Grant and NEM was supported by the London Centre for Terauniverse Studies (LCTS).
isbn-10	nvarchar(13)	1-932698-18-3
isbn-13	nvarchar(17)	978-1-932698-18-3
is-compliant-with-inst-policy	bit	
is-embargoed	bit	0
is-open-access	bit	1
issn	nvarchar(9)	1751-8113
issue	nvarchar(max)	45
journal	nvarchar(max)	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL
keywords	nvarchar(max)	quantum, high energy, lattice
language	nvarchar(max)	EN
location	nvarchar(max)	Cambridge, UK
medium	nvarchar(max)	DVD
name-of-conference	nvarchar(max)	Third International Lattice Theory Meeting
notes	nvarchar(max)	
number	nvarchar(max)	ARTN 45LT01
number-of-pieces	nvarchar(max)	
oa-location-file-version	nvarchar(max)	
oa-location-url	nvarchar(500)	

online-publication-date	date	2016-04-16
pagination Begin	nvarchar(25)	67
pagination Count	nvarchar(25)	8
pagination End	nvarchar(25)	74
parent-title	nvarchar(max)	
patent-number	nvarchar(max)	
patent-status	nvarchar(max)	
pii	nvarchar(max)	
place-of-publication	nvarchar(max)	Oxford, UK
preprint-for	nvarchar(max)	crossref-article-id:10.1084/jem.20201181
preprint-for hash	varchar(24)	BKyGuL2kW//MvQsF9BzI4g==
publication-date	date	2016-07-03
publication-status	nvarchar(200)	
public-url	nvarchar(500)	
publisher	nvarchar(max)	
publisher-licence	nvarchar(200)	
publisher-url	nvarchar(500)	http://publisher.url/article
record-created-at-source-date	date	
record-made-public-at-source-date	date	
references	nvarchar(max)	
relative-citation-ratio	decimal	3.2
repository-status	nvarchar(200)	
series	nvarchar(max)	
start-date	date	
thesis-type	nvarchar(200)	PhD Thesis
title	nvarchar(max)	Universal spectral behavior of $x^2(ix)^\varepsilon$ potentials
types	nvarchar(max)	Article, Journal
Verification Comment	nvarchar(max)	Manual record checked and verified by J. Bloggs on 3 Dec 2017.
Verification Status	nvarchar(50)	Verified
version	nvarchar(max)	1
volume	nvarchar(max)	49

abstract

The abstract of the publication.

acceptance-date

The date the publication was accepted for publication.

addresses

A list of addresses associated with the publication

altmetric-attention-score

A weighted count of all of the mentions Altmetric has tracked for an individual research output. This is the number seen inside a publication's Altmetric donut. See the Almetric support site for details about the Altmetric Attention Score.

are-files-confidential

Whether files attached to the record at its data source are confidential.

Compare with `confidential`, which, if `true`, is a general statement that the publication's full text is confidential, in any version and from any source.

associated-identifiers

A comma-separated list of identifiers for objects associated with the publication, e.g. grants, datasets, funding bodies etc. Note that identifiers that refer to the publication itself should be stored in the "external-identifiers" field, not in this one.

associated-authors

Authors associated with the publication.

Author Count

The number of authors listed in this record.

author-licence

A re-use licence specified by the author(s) of the publication. Typically refers to the re-use rights granted on an author's own manuscript uploaded to a repository, or a preprint at a source such as ArXiv.

authors

A list of the publication's authors. For more detailed author information, use the Publication Record Person table.

author-url

A URL for the author's own version of the publication.

Citation Count

The number of times the publication has been cited (according to the data source of the record).

collections

The collections to which the record belongs in a repository connected to Elements via RT2.

commissioning-body

The body which commissioned the publication.

confidential

Whether the full text of the publication is confidential. If `true`, this is a general statement that the full text is confidential, in any version and from any source.

Compare with `are-files-confidential`, which indicates that the specific files attached to the record at its data source are confidential.

confidential-files-reason

The reason for which the files attached to the record at the data source are confidential. Relates to `are-files-confidential`.

doi

The DOI (Digital Object Identifier) of the publication. Presented as a plain DOI without any web prefix.

edition

The edition of a publication (e.g. edition of a book).

editors

A list of the publication's editors.

eissn

The electronic ISSN of the journal in which the publication was published (i.e. the ISSN of the online version).

embargo-release-date

The first date on which the full text of the publication is no longer under any embargo. Used for calculations in the OA Monitor.

In addition to this publication record-level embargo-release-date column, there is a file-level [Embargo Release Date] column in the [Publication Record File] table. Depending on the data source and any crosswalks in place, embargo release dates may be present at either the file or record level, or both.

> **N.B.** This record-level embargo-release-date field is not queried directly when calculating embargo release dates, for example in the Open Access Monitor. Rather, it is used as a lower bound for file embargo release dates; i.e. for any given file, Elements works out its effective embargo release date by first taking the values of the file's "Embargo Release Date" field and this record-level embargo-release-date field, then taking the maximum non-null value from those.
>
> This has some consequences which may be considered counter-intuitive:
>
> - The 'Embargoed until' date shown against a repository file in Elements' user interface may differ from its value of "Embargo Release Date" in the [Publication Record File] table.
> - This record-level embargo-release-date field has no effect in OA Monitor when a repository item has no files.

> **N.B.** If your Elements system connects to a repository via an RT1 connection, embargo release dates and other data from that repository connection is not held in the [Publication Record] table. Instead, see the [Repository Item] table and the following columns from the [Publication] table:
>
> - "Full Text Comment"
> - "Requested Embargo Date"
> - "Requested Embargo Status ID"
> - "RT1 OA Location"
> - "RT1 OA Location File Version"

external-identifiers

A list of external identifiers for the publication. Note that "external" here means "not native to the data source" e.g. a *PubMed* identifier found within a *CrossRef* record.

The identifiers in this field refer explicitly to the publication itself. Identifiers for associated objects such as grants, datasets, funding bodies etc. are held in the "associated-identifiers" field.

field-citation-ratio

Field Citation Ration is a citation-based measure of scientific influence of one or more articles. It is calculated by dividing the number of citations a paper has received by the average number received by documents published in the same year and in the same Fields of Research (FoR) category. Currently FCR is only harvested from *Dimensions*.

Note that regardless of precedence order, this value will be surfaced in Publication table's row for the parent publication, in the `{Data Source}` `FCR` column.

For more about FCR see the Dimensions support article What is the FCR? How is it calculated?

filed-date

The date on which the publication was filed (e.g. for a patent) or submitted (e.g. for a thesis).

finish-date

The date on which the publication ended (e.g. for a performance or exhibition) or expired (e.g. for a patent), or, for a Conference publication, the date on which the conference at which it was presented ended.

formatted-abstract

Records the data captured via the formatted abstract field. If used, this field allows certain marked-up data to be rendered in the user interface (and possibly in downstream systems).

formatted-title

Records the data captured via the formatted title field. If used, this field allows certain marked-up data to be rendered in the user interface (and possibly in downstream systems), e.g.

- Universal spectral behavior of <i>x²(ix)^ε</i> potentials

would be rendered as

- Universal spectral behavior of $x^2(ix)^\varepsilon$ potentials

funding-acknowledgements

A concatenation of all funding acknowledgment data. Includes any funding acknowledgment text and a list of (Grant ID, Funder) pairs.

To see funding-acknowledgement data in a one row per grant format (rather than concatenated), use the Publication Record Grant Reference table.

funding-acknowledgements Acknowledgement Text

Descriptive text acknowledging funders.

isbn-10

The ISBN-10 of the publication.

isbn-13

The ISBN-13 of the publication.

is-compliant-with-inst-policy

This field is available for institutions who wish to configure RT2 data sources to populate Elements with a view taken from an institutional repository as to whether this publication is compliant with the institutional policy. In most cases, this value will not be set.

(Within Elements, it will be taken into account whenever compliance with any of the policies defined within Elements is decided. If the field has a non-null value then the publication will be deemed compliant or not based on whether the value is true or false, regardless of what else Elements might have decided otherwise)

is-embargoed

The data source's view of whether or not this publication was under embargo at the time of harvest. Beware that this piece of information may not have been updated since the record was first created.

is-open-access

If the data source has a view of whether or not a publication is open access this field will populated. Some of the automated data sources populate Elements with this information, or it can be populated in manual records depending on institutional configuration.

issn

The ISSN of the journal in which the the publication was published.

issue

The issue number of the journal in which the the publication was published.

journal

The journal in which the the publication was published.

keywords

The keywards assotiated with the publication.

language

The language value

location

The location where the publication was published, or otherwise first made available or the location where the event tool place.

medium

The medium in which the publication is created or transmitted.

name-of-conference

The name of the conference where the publication was published, or otherwise first made available.

notes

Additional data related to the publication.

number

This contains some kind of identifying number or code for the record. The exact meaning varies depending on publication type. By default, an Elements system uses this field on four publication types. Metadata is harvested from external data sources according to those meanings, which are:

Publication type	Default field usage
Chapter	Chapter number
Journal article	Article number
Patent	Application number
Report	Report number

N.B. In your institution's instance of Elements, these field usages may have been renamed, or further usages may have been added to other publlication types. Note that such changes will not change the harvesting logic for these four default usages of the `number` field.

number-of-pieces

The number of pieces included in the publication.

oa-location-file-version

The version of the Open Access file available at oa-location-url.

oa-location-url

A URL for an Open Access version of the full text of the publication.

> **N.B.** If you have a repository integration that uses an RT1 connection, RT1 OA Locations will not be here, but in the [RT1 OA Location] column of the [Publication] table.

online-publication-date

The date that the publication was published online, or otherwise first made available online.

pagination Begin

The page number of the first page of the publication.

pagination Count

The number of pages in the publication.

pagination End

The page number of the final page of the publication.

parent-title

The title of a containing publication or entity. For example, for a Chapter, the title of the book in which it was included.

patent-number

For publication of type "Patent", the patent number issued by the patent authority.

patent-status

The status of a patent, e.g. Pending, Awarded, Expired.

pii

The Publisher Item Identifier of the publication. See
https://en.wikipedia.org/wiki/Publisher_Item_Identifier.

place-of-publication

The place where the publication was published, or otherwise first made available.

preprint-for

Where the data source has indicated that the publication is a preprint, this field may contain identifying data for the subsequent publication that it is a preprint of.

preprint-for hash

A hash of the `preprint-for` field.

publication-date

The date that the publication was published, or otherwise first made available. When online-publication-date is also given, this explicitly means the date of publication *in print*. When online-publication-date is NULL, this may mean the date of publication in print or online.

publication-status

The status of the publication within the publication process e.g. Published, Accepted, Submitted, Not Published.

public-url

The publicly-accessible URL for the repository item represented by this record. Null if this record does not represent such an item or the item does not have a publicly-accessible URL.

publisher

The publisher of the publication, or the journal in which it was published.

publisher-licence

A re-use licence specified by the publisher. Refers to the the re-use rights granted on the published version of the publication, e.g. an article in a journal or conference proceedings; a published book; or a chapter in an edited book.

publisher-url

A URL for the published version of the publication.

record-created-at-source-date

The date that the metadata record was created *at the data source*.

record-made-public-at-source-date

The date that the metadata record was first publicly available from the data source.

references

A list of other publications that are referenced by the publication.

relative-citation-ratio

The Relative Citation Ratio for this record, if one was sent from the data source. Currently RCR is harvested only from *Dimensions* and *Dimensions for Universities*.

Note that regardless of precedence order, this value will be surfaced in Publication table's row for the parent publication, in the "{Data Source} RCR" column.

More about RCR:

- A brief description at metrics-toolkit.org

- (Hutchins, B.I., Yuan, X., Anderson, J.M. & Santangelo, G.M. (2015). Relative Citation Ratio (RCR): A new metric that uses citation rates to measure influence at the article level. https://doi.org/10.1101/029629

repository-status

For a record from an RT2 repository data source, the status of the item in the repository; e.g. Live, Not Live, Withdrawn, Deleted.

series

The series of the journal in which the the publication was published.

start-date

The start date of the event. Used for types such as Conference.

thesis-type

The type of the thesis/dissertation. This is a choice field with values restricted to:

- PhD Thesis
- Master's Thesis
- Undergraduate Dissertation

title

The title of the publication.

types

The type(s) of the publication, as listed at the data source. Note that this data is distinct from the Elements Publication type; however, 'types' data may be used to infer the publication type when a new publication is created.

Verification Comment

For Manual Records only, a comment associated with this record made by the data verification team at your institution.

Verification Status

For Manual Records only, the status assigned to this record by the data verification team at your institution.

version

The version number, e.g. for a piece if software.

volume

The volume number of the journal in which the the publication was published.

5.9.4.12 [Research Funding Opportunity Record] RFS schema

In addition to the standard [{Category} Record] table columns, the [Research Funding Opportunity Record] table has the columns listed below, reflecting the underlying fields for the Research Funding Opportunity category.

To access the same data with column names that reflect field display names rather than underlying fields, use the [Research Funding Opportunity Record (Field Display Names)] table.

Column	Type	Example value
access	nvarchar(max)	Public

access-GUID	uniqueidentifier	5345E44B-A261-4D92-9A7D-EF7D64559C82
base-currency-code	nvarchar(max)	GBP
block-multiple-proposals	bit	0
block-submissions	bit	0
contestable-funding	nvarchar(max)	Contestable
description	nvarchar(max)	Travel grants of up to £2000 are available for researchers wishing to attending conferences they would otherwise be unable to attend.
eligibility-criteria	nvarchar(max)	An application may only be submitted through the Research Office of an Eligible Organisation listed in the grant guidelines.
email-confirmation-message	nvarchar(max)	Thank you for your submission. If you have any questions please contact: grants@example.com
funder-close-date	date	2021-10-31
funder-open-date	date	2021-04-01
funder-opportunity-info	nvarchar(max)	More information on this funding opportunity is available here.
funder-scheme	nvarchar(max)	Endeavour Fund
funding-keywords	nvarchar(max)	Travel, Conference, Early Career Researcher
funding-type	nvarchar(max)	Travel grants
GUID	uniqueidentifier	3B550B3E-1E19-44C0-866E-A9D50104196A
internal-approval-date	date	2021-10-15
internal-close-date	date	2021-09-30
internal-contact-email	nvarchar(max)	fundingsupport@lilliput.edu
internal-contact-name	nvarchar(max)	Jane Doe
internal-contact-number	nvarchar(max)	555-123-456
internal-funding	bit	0
internal-open-date	date	2021-01-01
key-date-1	date	2021-01-18
key-date-1-description	nvarchar(max)	Advisory session 1
key-date-2	date	2021-02-22
key-date-2-description	nvarchar(max)	Advisory session 2
key-date-3	date	2022-01-01
key-date-3-description	nvarchar(max)	Earliest travel date
key-date-4	date	2022-12-31
key-date-4-description	nvarchar(max)	Latest travel date
key-date-5	date	2023-01-31
key-date-5-description	nvarchar(max)	Confirmation of attendance
key-date-6	date	(null)
key-date-6-description	nvarchar(max)	(null)
key-date-7	date	(null)

key-date-7-description	nvarchar(max)	(null)
key-date-8	date	(null)
key-date-8-description	nvarchar(max)	(null)
key-date-9	date	(null)
key-date-9-description	nvarchar(max)	(null)
key-date-10	date	(null)
key-date-10-description	nvarchar(max)	(null)
master-proposal-type	nvarchar(max)	Proposal
master-proposal-type-GUID	uniqueidentifier	F314EC1A-5A65-45C1-8A1B-4AF587D5FA17
matched-funding	bit	0
name	nvarchar(max)	Research Travel Award
on-screen-confirmation-message	nvarchar(max)	Thank you for your submission. If you have any questions please contact us at: grants@example.com
proposal-type	nvarchar(max)	Proposal
proposal-type-description	nvarchar(max)	Default configuration for Proposals
proposal-type-GUID	uniqueidentifier	9756F03C-EA31-40F8-8929-ABE600CCF92B
published	bit	1
record-created-at-source-when	datetime	2022-09-15 01:56:14.337
record-last-modified-at-source-when	datetime	2022-09-15 01:56:14.337
show-close-date	bit	0
status	nvarchar(max)	Applications Closed
status-GUID	uniqueidentifier	91212E10-22F0-4A2E-8145-F0822E10E486

access

The access setting for this Research Funding Opportunity. Possible values are:

- Public: available to all registered users.
- Hidden: only users who have been granted access to will be able to apply for this opportunity.

Any user with permission to edit Research Funding Opportunities can grant access, either to specific groups or individual users, by going to the 'View Access' page for this opportunity.

access-GUID

GUID for the access value.

base-currency-code

The base currency code for the opportunity.

block-multiple-proposals

Whether multiple proposals from the same person are allowed. 1 indicates that multiple proposals are blocked, 0 indicates that they are allowed.

block-submissions

Whether users are able to submit proposals for this Research Funding Opportunity. 1 indicates that submissions are blocked, 0 indicates that they are allowed.

contestable-funding

Contestable state text for this Research Funding Opportunity.

description

A description of the Research Funding Opportunity.

eligibility-criteria

Provides a summary of the eligibility criteria to apply for this opportunity.

email-confirmation-message

Message that is merged into the email that Principal Investigators receive when they have successfully submitted their proposal. Note that HTML is NOT supported.

funder-close-date

Funder's deadline for applications.

funder-open-date

Date from which the funder is accepting applications.

funder-opportunity-info

Funding opportunity details (as provided by the funder).

funder-scheme

Funder scheme.

funding-keywords

Funding keywords.

funding-type

Type of funding (e.g. Contract research, Travel grant, Fellowship).

GUID

GUID that uniquely identifies this Research Funding Opportunity.

internal-approval-date

The estimated date when internal review and approval processes are expected to be completed and the decision whether to proceed to funder application is made.

internal-close-date

The date upon which the Research Funding Opportunity will close and proposals will no longer be able to be submitted.

internal-contact-email

Internal support contact's email address.

internal-contact-name

Internal support contact's name.

internal-contact-number

Internal support contact's telephone number.

internal-funding

Whether this Research Funding Opportunity is internal funding or not.

internal-open-date

The date on which the published Funding Opportunity will be listed as 'Open' to users.

key-date-1, key-date-2,…, key-date-10

A date for incorporation into a Research Funding Proposal timeline.

key-date-1-description, key-date-2-description,…, key-date-10-description

Description of a date for incorporation into a Research Funding Proposal timeline.

master-proposal-type

The master proposal type to be used for applications for this Research Funding Opportunity.

master-proposal-type-GUID

GUID for the master proposal type to be used for this Research Funding Opportunity.

matched-funding

Indicates whether this Research Funding Opportunity requires matched funding.

name

The name of the Research Funding Opportunity.

on-screen-confirmation-message

On-screen message that can optionally be displayed to the Principal Investigator when they have successfully submitted their proposal.

proposal-type

The proposal type to be used for applications for this Research Funding Opportunity.

proposal-type-description

Description for the proposal type to be used for this Research Funding Opportunity.

proposal-type-GUID

GUID for the proposal type to be used for this Research Funding Opportunity.

published

Indicates whether the Research Funding Opportunity is visible to users, as per the `access` and `status` settings.

record-created-at-source-when

Date and time the opportunity was created.

record-last-modified-at-source-when

Date and time the opportunity was last updated.

show-close-date

Whether to show the close date for the Research Funding Opportunity to users.

status

The current status of the Research Funding Opportunity.

status-GUID

A GUID that uniquely identifies the status value of this Research Funding Opportunity.

5.9.4.13 [Research Funding Organisation Record] `RFS schema`

In addition to the standard [{Category} Record] table columns, the [Research Funding Organisation Record] table has the columns listed below, reflecting the underlying fields for the Research Funding Organisation category.

To access the same data with column names that reflect field display names rather than underlying fields, use the [Research Funding Organisation Record (Field Display Names)] table.

Column	Type	Example value
addresses	nvarchar(max)	9000 Rockville Pike, Bethesda, United States, MD 20892
aliases	nvarchar(max)	NIH
guid	uniqueidentifier	C84BC71E-5A41-4B83-AA50-AAD800D22992
is-parent	bit	1
name	nvarchar(max)	National Institutes of Health
organisation-code	nvarchar(max)	NIH
organisation-type	nvarchar(max)	Funder
organisation-type-guid	uniqueidentifier	9BF9201A-3CD2-457B-B913-6944B1256B7A
parent-guid	uniqueidentifier	(null)
phone-number	nvarchar(max)	(+1)301-496-4000
record-created-at-source-when	datetime	2022-09-15 01:56:14.337
record-last-modified-at-source-when	datetime	2022-09-15 01:56:14.337

addresses

Addresses for the organisation, presented as a single string. A breakdown of address data can be found in [Research Funding Organisation Record Address].

aliases

A comma-separated list of any other names that the organisation is known as. For example, University of Glasgow could also be known as Glasgow University.

guid

GUID that uniquely identifies this Research Funding Organisation.

is-parent

Whether this organisation is a parent of one or more other organisations.

name

The name typically used to refer to the organisation.

organisation-code

An optional code that can be used to refer to the organisation.

organisation-type

Organisation type (or category) name.

organisation-type-guid

GUID for the organisation's type.

parent-guid

If this organisation has a parent, contains the GUID of the parent organisation.

phone-number

Primary phone number for the organisation.

record-created-at-source-when

Date and time the organisation was created.

record-last-modified-at-source-when

Date and time the organisation was last updated.

5.9.4.14 [Research Funding Proposal Record] RFS schema

In addition to the standard [{Category} Record] table columns, the [Research Funding Proposal Record] table has the columns listed below, reflecting the underlying fields for the Research Funding Proposal category.

To access the same data with column names that reflect field display names rather than underlying fields, use the [Research Funding Proposal Record (Field Display Names)] table.

Column	Type	Example value
close-date	date	(null)
co-investigators	nvarchar(max)	Breeze B; Bender C
collaborators	nvarchar(max)	Byrne K; Buchan M
consultants	nvarchar(max)	Frendo S; Love-Phillips C
contributors	nvarchar(max)	Ranson-Hayes J
co-principal-investigators	nvarchar(max)	Adebayo V; Singh A
draft-proposal-reference	nvarchar(max)	2035
ethics-approval-reference	nvarchar(max)	
ethics-notes	nvarchar(max)	
external-collaborators	nvarchar(max)	
funding-type	nvarchar(max)	
guid	uniqueidentifier	60B92175-5521-433D-9DE1-AC7600BADCE0
has-applied-for-ethics-approval	bit	1
help-request	nvarchar(max)	
help-response	nvarchar(max)	

internal-submission-when	datetime	
is-help-requested	bit	0
managing-group-id	int	
master-proposal-type	nvarchar(max)	Proposal
master-proposal-type-guid	uniqueidentifier	F314EC1A-5A65-45C1-8A1B-4AF587D5FA17
non-financial-resources-description	nvarchar(max)	
other-participants	nvarchar(max)	Jones T; Van Dyke D; Potter H
outcome-guid	uniqueidentifier	F314EC1A-5A65-45C1-8A1B-4AF587D5FA17
post-docs	nvarchar(max)	Zang T
principal-investigators	nvarchar(max)	Zhang XY
project-description	nvarchar(max)	Corporate Philanthropy is multi-dimensional and involves both individual and organisational decision-making. We conducted a qualitative study of employees' involvement in CP processes in ten workplaces to identify whether and how they are involved in CP decision-making.
project-duration-in-months	int	6
project-end-date	date	2022-09-14
project-managers	nvarchar(max)	Doe J
project-start-date	date	2022-03-14
project-team-notes	nvarchar(max)	
proposal-type	nvarchar(max)	Proposal
proposal-type-guid	uniqueidentifier	9756F03C-EA31-40F8-8929-ABE600CCF92B
record-created-at-source-when	datetime	
record-last-modified-at-source-when	datetime	
reference	nvarchar(max)	U1-20065626
requires-ethics-approval	bit	1
status	nvarchar(max)	Submitted
status-guid	uniqueidentifier	99B650EC-AE6A-4CD3-996D-DCF59F4EC021
students	nvarchar(max)	
supervisors	nvarchar(max)	
title	nvarchar(max)	Collective Giving: Exploring Employee Involvement in Corporate Philanthropy
total-award	nvarchar(33)	GBP 104,000
total-award Currency	nvarchar(3)	GBP
total-award Value	decimal(28,6)	104000.000000
total-requested	nvarchar(33)	GBP 116,000
total-requested Currency	nvarchar(3)	GBP
total-requested Value	decimal(28,6)	116000.000000
validation-stage	nvarchar(max)	ROUNDS
validation-stage-guid	uniqueidentifier	0C4F425E-2277-4E46-A5C2-7248E8AFA751

close-date

To be removed in a later version. Do not use this column in your queries.

co-investigators

Named Co-investigators on the Proposal

collaborators

Named Collaborators on the Proposal

consultants

Named Consultants on the Proposal

contributors

Named Contributors on the Proposal

co-principal-investigators

Names of co-principal investigators, presented as a single string. A breakdown of co-PI data can be found in [Research Funding Proposal Record Person].

draft-proposal-reference

An internal, system-assigned ID number referencing the draft for this proposal. Can be used to search for a draft proposal in the RFS Admin console and visible to the users on the proposal itself.

ethics-approval-reference

Ethics approval reference

ethics-notes

Notes on Ethical approval

external-collaborators

Named External collaborators on the Proposal

funding-type

Funding type

guid

GUID that uniquely identifies this Research Funding Proposal.

has-applied-for-ethics-approval

Indication the PI has already applied for Ethics approval

help-request

Description of the support the PI is requesting

help-response

Response from Professional services to the PI's request for support

internal-submission-when

Proposal submitted date and time.

is-help-requested

Indication the PI has requested support with their draft Proposal

managing-group-id

The identifier of the managing group for the proposal.

master-proposal-type

The master proposal type.

master-proposal-type-guid

A GUID uniquely identifying the master proposal type.

non-financial-resources-description

Description of any additional resources required.

other-participants

Names of other participants, presented as a single string. A breakdown of other participants' data can be found in [Research Funding Proposal Record Person].

outcome-guid

Funding Proposal outcome GUID.

post-docs

Named Post-doctoral researchers on the Proposal

principal-investigators

Names of principal investigators, presented as a single string. A breakdown of PI data can be found in [Research Funding Proposal Record Person].

project-description

A description of the project.

project-duration-in-months

Expected project duration in months.

project-end-date

Expected project end date.

project-managers

Names of project managers, presented as a single string. A breakdown of project managers' data can be found in [Research Funding Proposal Record Person].

project-start-date

Expected project start date.

project-team-notes

Notes on the Project team.

proposal-type

The proposal type.

proposal-type-guid

A GUID uniquely identifying the proposal type.

record-created-at-source-when

Date and time the proposal was created.

record-last-modified-at-source-when

Date and time the proposal was last updated.

reference

A long-term reference value, assigned at point of proposal submisison.This exists throughout the life cycle of the proposal/project.

requires-ethics-approval

Indication whether the Proposal requires Ethics approval

status

Status of this proposal.

status-guid

A GUID uniquely identifying the status of this proposal.

students

Named Students on the Proposal.

supervisors

Named Supervisors on the Proposal.

title

The proposal's title

total-award

The total monetary amount awarded, presented as a string including currency code and numerical value.

total-award Currency

The currency code of the total award amount.

total-award Value

The numerical value of the total award amount.

total-requested

The total monetary amount requested, presented as a string including currency code and numerical value.

total-requested Currency

The currency code of the total requested amount.

total-requested Value

The numerical value of the total requested amount.

validation-stage

Current validation stage of the proposal.

validation-stage-guid

A GUID uniquely identifying the validation stage.

5.9.5 [Research Funding Review Record]   RFS schema

Lists all Research Funding Reviews.

In addition to the standard [{Category} Record] table columns, the [Research Funding Proposal Record] table has the columns listed below, reflecting the underlying fields for the Research Funding Proposal category.

To access the same data with column names that reflect field display names rather than underlying fields, use the [Research Funding Review Record (Field Display Names)] table.

Column	Type	Example value
allocated-by	nvarchar(max)	Byrne K
allocated-by Email	nvarchar(100)	byrne@lilliput.com
allocated-by First Initial	nvarchar(3)	K
allocated-by First Name	nvarchar(50)	Kate
allocated-by Last Name	nvarchar(50)	Byrne
allocated-by Middle Initials	nvarchar(11)	
allocated-by Middle Names	nvarchar(100)	
allocated-by Phone number	nvarchar(100)	02923 202302
allocated-by Resolved User ID	int	2134
allocated-when	datetime	
comment-to-reviewer	nvarchar(max)	
dispatched-when	datetime	2023-09-15 01:56:14.337
due-date	date	2023-09-12
feedback-to-principal-investigator	nvarchar(max)	
finalised-when	datetime	
group-id	int	32
guid	uniqueidentifier	
outcome-guid	uniqueidentifier	
record-created-at-source-when	datetime	2023-09-15 01:56:14.337
record-last-modified-at-source-when	datetime	2023-09-15 01:56:14.337
reviewer	nvarchar(max)	Bloggs J

reviewer Email	nvarchar(100)	bloggs@lilliput.com
reviewer First Initial	nvarchar(3)	J
reviewer First Name	nvarchar(50)	Joe
reviewer Last Name	nvarchar(50)	Bloggs
reviewer Middle Initials	nvarchar(11)	
reviewer Middle Names	nvarchar(100)	
reviewer Phone number	nvarchar(100)	23522 324023
reviewer Resolved User ID	int	1366
review-type-guid	uniqueidentifier	
status-guid	uniqueidentifier	

allocated-by

Contact that allocated this review.

allocated-by Email

Email of Contact that allocated this review.

allocated-by First Initial

First initial of Contact that allocated this review.

allocated-by First Name

First name of Contact that allocated this review.

allocated-by Last Name

Last name of Contact that allocated this review.

allocated-by Middle Initials

Middle initials of Contact that allocated this review.

allocated-by Middle Names

Middle names of Contact that allocated this review.

allocated-by Phone number

Phone number of Contact that allocated this review

allocated-by Resolved User ID

Resolved User ID of of Contact that allocated this review

allocated-when

Date and time that the review was allocated

comment-to-reviewer

Comment to reviewer (internal guidance)

dispatched-when

Date and time that the review was dispatched.

due-date

Date that the review is due by.

feedback-to-principal-investigator

Feedback to principal investigator.

finalised-when

Date and time that the review was finalised.

group-id

Group ID for the review.

guid

Internal ID.

outcome-guid

Funding Proposal Review outcome GUID.

record-created-at-source-when

The date that the metadata record was created at the data source.

record-last-modified-at-source-when

The date that the metadata record was last modified in the source system.

reviewer

The reviewer contact.

reviewer Email

The email of the reviewer contact.

reviewer First Initial

The first initial of the reviewer contact.

reviewer First Name

The first name of the reviewer contact.

reviewer Last Name

The last name of the reviewer contact.

reviewer Middle Initials

The middle initials of the reviewer contact.

reviewer Middle Names

The middle names of the reviewer contact.

reviewer Phone number

The phone number of the reviewer contact.

reviewer Resolved User ID

The resolved user ID of the reviewer contact.

review-type-guid

Review type GUID.

status-guid

Review status GUID.

5.9.5.1 [Teaching Activity Record]

In addition to the standard [{Category} Record] table columns, the [Teaching Activity Record] table has the columns listed below, reflecting the underlying fields for the Teaching Activity category. If you have created custom underlying fields in the Teaching Activity category they will also be represented by columns in this table, distinguished by the prefix "c-".

To access the same data with column names that reflect field display names rather than underlying fields, use the [Teaching Activity Record (Field Display Names)] table.

Column	Type	Example value
academic-session	nvarchar(200)	
co-contributors	nvarchar(max)	
consent-to-release	bit	
course-code	nvarchar(max)	
course-level	nvarchar(200)	
degree-level	nvarchar(200)	
degree-status	nvarchar(200)	
degree-subject	nvarchar(max)	
degree-type	nvarchar(200)	
description	nvarchar(max)	
end-date	date	
examination-role	nvarchar(200)	
institution	nvarchar(max)	
lab-hours	int	
lecture-hours	int	
number-of-credits	decimal	
number-of-students	int	
other-contact-hours	int	
partners	nvarchar(max)	
person	nvarchar(max)	
person Email	nvarchar(100)	
person First Initial	nvarchar(3)	
person First Name	nvarchar(50)	
person Last Name	nvarchar(50)	
person Middle Initials	nvarchar(11)	
person Middle Names	nvarchar(100)	
person Phone number	nvarchar(100)	
person Resolved User ID	int	

person-identifier	nvarchar(max)	
release-date	date	
section	nvarchar(max)	
start-date	date	
student-level	nvarchar(max)	
supervisory-role	nvarchar(200)	
title	nvarchar(max)	
tutorial-hours	int	
url	nvarchar(500)	

academic-session

The session in which the course is taught.

co-contributors

The names of any co-contributors. Depending on the type of Teaching Activity this may, for example, represent co-instructors, co-developers or co-supervisors of the activity.

consent-to-release

Indicates whether consent has been received to release the student's name (e.g. for a supervised student).

course-code

The institution's course code.

course-level

The student year/rank under which the course taught.

degree-level

The level of degree for which the program was developed.

degree-status

Indicates whether or not the degree has been completed.

degree-subject

The supervised student's major course of study.

degree-type

The designation of the degree for which the program was developed, or, for supervision-type Teaching Activities, the designation of the supervised student's degree.

description

A textual description the Teaching Activity.

end-date

The date the Teaching Activity ended.

examination-role

The nature of the person's role in the examination.

institution

The name of the institution where the Teaching Activity happened or will happen.

lab-hours

The number of hours of laboratory instruction the person contributed per week.

lecture-hours

The number of hours of lecture the person contributed per week.

number-of-credits

The institution's credit value for the course.

number-of-students

The number of students in a typical session.

other-contact-hours

The number of other contact/office hours that were required per week.

partners

Institutions that use the Teaching Activity, participated in it's development, or are otherwise affiliated.

person

The full name of the person who was supervised, examined, mentored, or was otherwise the subject of the Teaching Activity.

person Email

The email address of the person named in the 'person' field.

person First Initial

The first initial of the person named in the 'person' field.

person First Name

The first name of the person named in the 'person' field.

person Last Name

The last name of the person named in the 'person' field.

person Middle Initials

The middle initial of the person named in the 'person' field.

person Middle Names

The middle name of the person named in the 'person' field.

person Phone number

The phone number of the person named in the 'person' field.

person Resolved User ID

The Elements user ID of the person named in the 'person' field, if they have been successfully resolved to an Elements user.

person-identifier

The institution's identification number for the person named in the 'person' field.

release-date

The date of first use of the Teaching Activity or, for degree supervions, the date the degree was or is expected to be received.

section

An organisational section, e.g. the department within the given institution that administered an examination.

start-date

The date the Teaching Activity began or took place.

student-level

The *current* employment of the person named in the 'person' field.

supervisory-role

The nature of the supervisory role.

title

Depending on the type of Teaching Activity:

- the title of the course or program taught or developed; or
- the title of the research output of the person named in the 'person' field that this Teaching Activity contributed to; or
- the nature of the mentoring relationship.

tutorial-hours

The number of hours of tutorial contributed per week by the person named in the 'person' field.

url

A URL associated with the Teaching Activity.

5.9.5.2 [User Record]

Column	Type	Example value
addresses	nvarchar(max)	
overview	nvarchar(max)	
research-interests	nvarchar(max)	
teaching-summary	nvarchar(max)	

addresses

Addresses associated with the user.

overview

Text providing an overview of the user. Displayed on the user's profile page in Elements.

research-interests

A short summary of the areas of research the user is active in, particularly relating to funding. Can be displayed on the user's profile in the Discovery module.

teaching-summary

A short summary of the user's teaching activities. Can be displayed on the user's profile in the Discovery module.

5.10 Links and Relationships between objects

Links are created between objects in Elements to represent the various ways that the objects relate to each other. A link is modelled as a typed arrow from one object to another object. At most one link of any type can exist between any given pair of objects.

Some types of link use the concept of **approval**, also referred to as "claiming". Such links can be in one of three states:

- Approved
- Pending
- Declined

Note that all link types which use the approval concept involve a User at one end of the link.

The word **relationship** is used to mean a link that is either approved, or is of a link type that does not use the approval concept and is therefore considered approved by default. Pending and declined links are not considered to be relationships (in the case of a declined link, it is quite the opposite; when a user declines a link, they are making an assertion that the relationship between themselves and the object does *not* exist).

The [Link] table lists all links in system, of all link types and of all approval statuses. This may be much more data than is required for most purposes. To assist with this, many smaller views on the [Link] table are provided, of three basic types:

- 5.10.1 [{Category} {Category} Relationship] - lists relationships (see the above definition) between objects of the two categories in the table name.
- 5.10.2 [Pending {Category}] - lists all pending links between Users and object of the given {Category}.
- 5.10.3 [Declined {Category}] - lists all declined links between Users and object of the given {Category}.

All possible link types are listed in the [Relationship Type] table.

5.10.1 [{Category} {Category} Relationship]

Each [{Category} {Category} Relationship] table lists all the relationships between two categories of object. For example, the [Publication User Relationship] table holds all relationships between publications and users.

Link types do not exist between every pair of categories, therefore tables are not created for every possible pair.

Column	Type	Example value
ID	int	10382
[{First Category}] ID	int	1
[{Second Category}] ID	int	7
Approval Basis Affiliation	nvarchar(400)	Lilliput

Approval Basis Identifier Scheme ID	int	8
Approval Basis Identifier Source Category ID	int	1
Approval Basis Identifier Source ID	int	7
Approval Basis Identifier Value	nvarchar(200)	0000-0001-2735-6129
Approval Basis Name Variant	nvarchar(200)	Smith, J
Approved By Agent ID	int	1
Approved By Agent Type ID	int	2
Approved By User ID	int	NULL
Created When	datetime	2013-09-15 01:56:14.333
Modified When	datetime	2013-09-15 01:56:14.333
Reporting Date 1	date	2008-04-05
Reporting Date 2	date	(null)
Reversed Type	nvarchar(100)	Author of
Type	nvarchar(100)	Authored by
[{First Category}] Percentage	decimal	21.3
[{Second Category}] Percentage	decimal	78.7

ID

The unique ID of the relationship.

[{First Category}] ID

This field's name depends upon which table you are looking at. For the [Publication User Relationship] table, for example, this is the "Publication ID" column, and references the publication in the [Publication] table by its ID.

[{Second Category}] ID

This field's name depends upon which table you are looking at. For the [Publication User Relationship] table, for example, this is the "User ID" column, and references the user in the [User] table by their ID.

Approval Basis Affiliation

When not null, this records which of the relevant user's affiliation search terms was used by the approving agent in its decision to approve the relationship. The affiliation search term will typically have been seen in the metadata of the relevant publication. Not all types of agent record this information.

Approval Basis Identifier Scheme ID

Together with the `Approval Basis Identifier Value` column, this records which identifier (such as an orcid or PubMed ID) was used by the approving agent in its decision to approve the relationship. The identifier will typically have been seen in the metadata of the r elevant publication, grant or other involved object. Not all types of agent record this information. This column references `[Identifier Scheme].ID`

Approval Basis Identifier Source Category ID

Together with the `Approval Basis Identifier Source ID` column, this records in which data source's metadata the identifier specified by the Approval Basis Identifier Scheme ID and Approval Basis Identifier Value columns was seen (e.g. Dimensions or PubMed). This column references `[Data Source].[Category].ID`. Not all types of agent record this information.

Approval Basis Identifier Source ID

Together with the `Approval Basis Identifier Source Category ID` column, this records in which data source's metadata the identifier specified by the Approval Basis Identifier Scheme ID and Approval Basis Identifier Value columns was seen (e.g. Dimensions or PubMed). This column references `[Data Source].ID`. Not all types of agent record this information.

Approval Basis Identifier Value

Together with the `Approval Basis Identifier Scheme ID` column, this records which identifier (such as an orcid or PubMed ID) was used by the approving agent in its decision to approve the relationship. The identifier will typically have been seen in the metadata of the relevant publication, grant or other involved object. Not all types of agent record this information.

Approval Basis Name Variant

When not null, this records which of the relevant user's name variant search terms was used by the approving agent in its decision to approve the relationship. The name variant will typically have been seen in the metadata of the relevant publication. Not all types of agent record this information.

Approved By Agent ID

The ID of the agent that approved the relationship , such as a user, an API account, the "synchroniser", or the "resolver". Where the agent type is "user", this is the user's ID. Where the agent type is "API account", this is the API account ID, etc. Agent types representing parts of Elements itself, such as the synchroniser or resolver, will always have an agent ID of 1.

Approved By Agent Type ID

The type of agent that approved the relationship, such as a user, an API account, the "synchroniser", or the "resolver".References `[Agent Type].ID`.

Approved By User ID

If the agent that approved the relationship was a user (see the `Approved By Agent Type ID` column), then this column will be the ID of the user that approved the relationship, and will have the same value as the Approved By Agent ID column. Otherwise, this column will be null.

Reporting Date 1

Not all types of relationship have a concept of Reporting Date 1, in which case the value will be NULL. See the appropriate row for the relationship's type in the [Relationship Type] table to see if Reporting Date 1 is used for this relationship type.

Where Reporting Date 1 is used, it usually represents the date on which the relationship began.

See your system administrator for more information about what Reporting Date 1 represents for this type of relationship.

Reporting Date 2

Not all types of relationship have a concept of Reporting Date 2, in which case the value will be NULL. See the appropriate row for the relationship's type in the [Relationship Type] table to see if Reporting Date 2 is used for this relationship type.

Where both Reporting Date 2 and Reporting Date 1 are used, together they usually represent a date range relevant to the relationship, usually the point at which the relationship began, and ended.

See your system administrator for more information about what Reporting Date 2 represents for this type of relationship.

Reversed Type

Gives the name of the relationship type looking backwards along the relationship arrow.

Type

Gives the name of the relationship type looking forwards along the relationship arrow.

5.10.2 [Pending {Category}]

These tables list pending links between users and objects in the given category (i.e. where no decision has yet been made to claim or decline the link). The table only exists for categories with link types that use the approval process. As of Elements version 5.15, this is the Publication and Grant categories.

Several columns in this table detail the reasons that this link has been suggested and the agent responsible for the suggestion. Typically, most of these columns will be NULL for any given row in the table.

Column	Type	Example value
ID	int	17332
{Category} ID	int	71548
User ID	int	3016
Suggestion Basis Affiliation	nvarchar(400)	Lilliput University
Suggestion Basis Identifier Scheme ID	int	9
Suggestion Basis Identifier Value	nvarchar(200)	0000-0001-2735-6129
Suggestion Basis Identifier Source Category ID	int	1
Suggestion Basis Identifier Source ID	int	7
Suggestion Basis Name Variant	nvarchar(200)	Smith, J
Suggested By Agent ID	int	1
Suggested By Agent Type ID	int	2
Suggested By User ID	int	NULL
Suggested When	datetime	2019-02-24 16:12:26.825
Modified When	datetime	2019-03-05 14:35:24.747
Type ID	int	8
Type	nvarchar(100)	Authored by
Reversed Type	nvarchar(100)	Author of

ID

A unique integer identifier for the pending decision.

{Category} ID

The ID of the object pending a decision by the user. References `[{Category}].ID`.

User ID

The ID of the user who has been asked to approve or decline the link. References `[User].ID`.

Suggestion Basis Affiliation

When not null, this records which of the relevant user's affiliation search terms was used by the suggesting agent in its decision to suggest the relationship. The affiliation search term will typically have been seen in the metadata of the relevant publication. Not all types of agent record this information.

Suggestion Basis Identifier Scheme ID

Together with the `Suggestions Basis Identifier Value` column, this records which identifier (such as an orcid or PubMed ID) was used by the suggesting agent in its decision to suggest the relationship. The identifier will typically have been seen in the metadata of the relevant publication, grant or other involved object. Not all types of agent record this information. This column references `[Identifier Scheme].ID`

Suggestion Basis Identifier Value

Together with the `Suggestion Basis Identifier Scheme ID` column, this records which identifier (such as an orcid or PubMed ID) was used by the suggesting agent in its decision to suggest the relationship. The identifier will typically have been seen in the metadata of the relevant publication, grant or other involved object. Not all types of agent record this information.

Suggestion Basis Identifier Source Category ID

Together with the `Suggestion Basis Identifier Source ID` column, this records in which data source's metadata the identifier specified by the Suggestions Basis Identifier Scheme ID and Suggestions Basis Identifier Value columns was seen (e.g. Dimensions or PubMed). This column references `[Data Source].[Category].ID`. Not all types of agent record this information.

Suggestion Basis Identifier Source ID

Together with the `Suggestion Basis Identifier Source Category ID` column, this records in which data source's metadata the identifier specified by the Suggestion Basis Identifier Scheme ID and Suggestion Basis Identifier Value columns was seen (e.g. Dimensions or PubMed). This column references `[Data Source].ID`. Not all types of agent record this information.

Suggestion Basis Name Variant

When not null, this records which of the relevant user's name variant search terms was used by the suggesting agent in its decision to suggest the relationship. The name variant will typically have been seen in the metadata of the relevant publication. Not all types of agent record this information.

Suggested By Agent ID

The type of agent that suggested the relationship, such as a user, an API account, the "synchroniser", or the "resolver". References `[Agent Type].ID`.

Suggested By Agent Type ID

The ID of the agent that suggested the relationship, such as a user, an API account, the "synchroniser", or the "resolver". Where the agent type is "user", this is the user's ID. Where the agent type is "API account", this is the API account ID, etc. Agent types representing parts of Elements itself, such as the synchroniser or resolver, will always have an agent ID of 1.

Suggested By User ID

If the agent that suggested the relationship was a user (see the `Approved By Agent Type ID` column), then this column will be the ID of the user that suggested the relationship, and will have the same value as the Suggested By Agent ID column. Otherwise, this column will be null.

Suggested When

A datestamp indicating the time that the link was suggested.

Modified When

A datestamp indicating the last time this entry was updated.

Type ID

The integer ID of the link type. References `[Relationship Type].ID`.

Type

Descriptive text for the link type, e.g. "Authored by", "Funder of".

Reversed Type

Descriptive text for the link type in the reversed direction, e.g. "Author of", "Funded by".

5.10.3 [Declined {Category}]

These tables list declined (i.e. rejected) links between users and objects in the given category. The table only exists for categories with link types that use the approval process. As of Elements version 5.15, this is the Publication and Grant categories.

IMPORTANT LEGAL NOTE: the way you use bibliographic and bibliometric data for the publications referenced only in this table (and not by the [{Category}} User Relationship] table) may be subject to the particulars of your contractual agreements with the relevant data providers. Typically, arrangements with Clarivate and Elsevier in particular prohibit the use of data that does not directly relate to your institution or current or past employees. The rows in this table may represent references to such publications. Please contact your data provider's representative if you are in any doubt over your intended use of data.

Column	Type	Example value
ID	int	1
Modified When	datetime	2016-03-22 17:44:45.933
Publication ID	int	3435
User ID	int	5

ID

A unique identifier for the rejected association.

Modified When

A datestamp indicating the last time this entry was updated.

Publication ID

The ID of the publication declined by the user. This references the publication in the [Publication] table.

User ID

The ID of the user who declined the publication. This references the user in the [User] table.

5.11 Other category-specific tables

5.11.1 [Duplicate {Category} Suggestion]

> **N.B.** As of Elements version 5.18.0, the job that populates these tables no longer runs on an automatic schedule, in order to improve system performance. These tables will therefore usually be empty, or may contain out-of-date data. If you have processes that depend on these tables, please contact Symplectic to discuss how to generate duplicate suggestions.

Symplectic Elements has the ability to detect likely duplicated publications and grants data in the

system, by detecting pairs of Elements objects potentially representing the same real-world object. If you wish to use this ability, please contact Symplectic about running the duplicate suggestion matching process.

After running the process on a given category (either publications or grants), the corresponding duplicate suggestion table will list the suggested pairs of duplicate objects within that category. For example, the [Duplicate Publication Suggestion] table lists pairs of publication objects that the system thinks are likely to represent the same real-world publication.

It is then up to a human-controlled process to assess each suggestion and act upon the ones that are determined to be accurate (i.e. where the pair of Elements objects do genuinely represent a single real-world object). This is done by merging the suggested pair into a single Elements object.

N.B. The duplicate suggestion matching process does not affect Elements' automatic matching algorithms for publications and grants, which are used on new records at the time they are ingested into the system. Duplicate suggestions require a lower degree of confidence than automatic matching. Accordingly, duplicate suggestions can include cases where record metadata indicates that it is likely that two distinct Elements objects represent a single real-world publication or grant but the correlation was not strong enough for the system to automatically merge the records into a single object.

N.B. Although the system automatically creates a [Duplicate {Category} Suggestion] table for each category of object, suggestions can *only* be generated for the publication and grant categories.

Column	Type	Example value
{Category} 1 ID	int	54249
{Category} 2 ID	int	119253
Suggested When	datetime	2011-01-07 13:30:14.113

{Category} 1 ID

This field's name depends upon which table you are looking at. For the "Duplicate Publication Suggestion" table, for example, this is the "Publication 1 ID" column, and references the first publication of the pair of publications identified with each other.

{Category} 2 ID

This field's name depends upon which table you are looking at. For the "Duplicate Publication Suggestion" table, for example, this is the "Publication 2 ID" column, and references the second publication of the pair of publications identified with each other.

Suggested When

The time at which the likely duplicate entry was detected by the system.

5.11.2 [User {Category} Preferences]

Each user preferences table is named after one category. User preferences are indications to Elements and downstream systems as to how a particular user views an object. Every user can have their own set of preferences against an object: these are particular to each user-object pairing, unlike object-level properties. Examples of user preferences are whether the user has marked the object as a favourite, or in the case where an object contains multiple records, which record is the user's preferred one.

If a user has not set their preferences are for a particular object, there will be no row for that user/object pair. In this case, you should assume the "default" user preferences, i.e. the object is not marked as a favourite and no preferred record is chosen. If a user has set and preferences differently to the default values, a row will exist in this table to indicate it.

Column	Type	Example value
User ID	int	
{Category} ID	int	
Favourite	bit	
Modified When	datetime	2013-09-15 01:56:14.333
Preferred Record ID	int	

User ID

User's ID.

{Category} ID

Object's ID.

Favourite

Whether the object is marked as a "favourite" by the user.

Modified When

The most recent time at which the preferences for this object were modified, in `datetime` format.

Preferred Record ID

If the value is non-null, it indicates the user's preference for which record of the object should be used when displaying data in the context of the user. Such preferences will typically exist between users and publications.

Each user related to a given publication might nominate a different "preferred record". One user might wish that you use data from the *Web of Science* when displaying the publication and another might wish that you use the record from *Scopus*. Do not confuse the concept of "preferred record" with the concept of "reporting precedence" (see the section on [{Category} Source] tables).

Resolve the `Preferred Record ID` using the ID column of the relevant record table (e.g. `[Publication Record].ID` if the relationship is between a user and a publication).

> **N.B.** Up to and including Elements 5.10.1, this table included a `Visible` column, indicating whether the user has expressed a preference for their relationship with the object to be visible to others. In Elements 5.11.0, this was superseded by a new `Privacy Level` column in the [{Category} {Category} Relationship] tables. If you are upgrading from a version earlier than Element 5.11.0, please check whether any of your queries use the `Visible` column and re-write them as necessary. See Technical upgrade guide: Elements v5.11 Reporting Database changes for more information.

5.12 Child tables

Many tables in the reporting database are child tables of another table. All child tables share a common structure for the first three or four columns in the table, and can be identified by looking for this structure:

Column	Type	Example value
[Parent ID]	int	
Property	nvarchar(100)	authors
Index	int	
ID	bigint	

[Parent ID]

The first column references the parent row of this row in the parent table. The parent table's name is provided by both the name of the [Parent ID] column in this table and is included in the name of the child table itself. The value in this column references the uniquely valued [ID] column in the parent table.

As an example, the [Publication Record Person] table is a child table of the [Publication Record] table, and contains the following four columns as its first four columns:

Column	Type	Example value
Publication Record ID	int	
Property	nvarchar(100)	authors
Index	Int	
ID	bigint	

Each row in this table then represents a person belonging to the parent row in the [Publication Record] table whose [ID] column has a value of 1.

Property

The second column represents the property name of the list of child entities to which this child entity belongs. As an example, a row with the above values belongs to the "authors" list of person entities in publication record 1. There might be other rows in this table belonging to other lists, such as the "editors" list of person entities.

Note that while the "Property" column exists in all child tables, it is not relevant in every context. In these cases, its value will be the empty string.

Index

The last of the three standard child table columns contains information about the ordering of the child entities within the list specified by the Property column. Order by increasing value for items with the same Property column value.

ID

This column will only appear if this table itself has further child tables. The value in this column is used by child rows of this table to refer back to a row.

5.12.1 [* Academic Appointment]

Each row in the various Academic Appointment tables represents a single academic appointment associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
End Date	date	(null)
End Date Precision ID	Int	(null)
Institution Address Address Hash	Nvarchar(24)	jryHi68gn3icjdkdngv2f==
Institution Address City	nvarchar(50)	London
Institution Address Country	nvarchar(50)	United Kingdom
Institution Address Full Address	nvarchar(500)	Imperial College London, Department of Physics, Prince Consort Road, London, SW7 2BB, United Kingdom
Institution Address ISO Country Code	nvarchar(2)	GB
Institution Address Name	nvarchar(100)	(null)
Institution Address Organisation	nvarchar(100)	Imperial College London

Institution Address Postcode	nvarchar(15)	SW7 2BB
Institution Address Privacy Level	nvarchar(32)	Public
Institution Address Region	nvarchar(50)	(null)
Institution Address Street	nvarchar(100)	Prince Consort Road
Institution Address Suborganisation	nvarchar(100)	Department of Physics
Institution Address Type	nvarchar(30)	(null)
Position	nvarchar(200)	Professor of Theoretical Physics
Privacy Level	nvarchar(32)	Public
Start Date	date	
Start Date Precision ID	int	

End Date & End Date Precision ID

The end date and its corresponding precision ID describe the date at which the appointment concluded.

Institution Address [*]

The components of the address of the institution to which the academic appointment was made.

Position

The position of the appointee.

Privacy Level

The privacy state of the whole academic appointment: whether it has been made public or private.

Start Date & Start Date Precision ID

The start date and its corresponding precision ID describe the date at which the appointment started.

5.12.2 [* Address]

Each row in the various Address child tables represents a single address. The different segments of the address are represented by the different columns of the table.

Column	Type	Example value
[Standard child table columns]		
Address Hash	varchar(24)	H6oi4jh3b799hjsvr3jcka==
City	nvarchar(50)	London
Country	nvarchar(50)	United Kingdom
Full Address	nvarchar(1000)	Elements Team, Symplectic Ltd., Macmillan Building, 4 Crinan Street, London, Greater London, NW1, United Kingdom
ISO Country Code	nvarchar(2)	GB
Name	nvarchar(100)	Elements Team
Organisation	nvarchar(500)	Symplectic Ltd.
Postcode	nvarchar(15)	NW1
Privacy Level	nvarchar(32)	Public
Region	nvarchar(50)	Greater London
Street	nvarchar(100)	4 Crinan Street

Suborganisation	nvarchar(100)	Macmillan Building
Type	nvarchar(30)	Mailing

N.B. Changes to [* Address] tables in Elements version 5.7

The columns GRID ID, GRID Institution Link, GRID Institution Type, GRID Latitude, GRID Longitude have been moved from these tables into the new [Address] table where each row represents a unique Full Address string in the system. To access this data, JOIN this table to the [Address] table on the [Address Hash] columns that exist in both tables, e.g.:

```
SELECT  *
FROM    [User Record Address] AS a
        INNER JOIN [Address] AS b
        ON a.[Address Hash] = b.[Address Hash]
```

5.12.3 [* Application Form]   RFS schema

Holds information on all proposal / application forms affiliated with a Research Funding Proposal record

Column	Type	Example value
[Standard child table columns]		
GUID	uniqueidentifier	
Level	int	
Parent Form GUID	uniqueidentifier	
Name	nvarchar(max)	

GUID

ID of the form.

Level

Where a nested form, the level of the form.

Parent Form GUID

Where a nested form, the level of the form.

Name

The name of the form.

5.12.4 [* Ancestor]

Provides information on all ancestors for a particular group.

Column	Type	Example value
Ancestor Group ID	int	325
Group ID	int	484

Ancestor Group ID

The ancestor of the group referenced in the 'Group ID' column.

Group ID

The ID of the group for which there is an ancestor.

5.12.5 [* Attachment]

The attachment tables hold details of attachments at item, list or exercise level, added by users within the Assessment module. They do not hold the attached files themselves, rather details about the files.

Column	Type	Example value
[Standard child table columns]		
Created When	datetime	2016-11-03 19:22:47.163
Description	nvarchar(max)	Test
File ID	int	
Filename	nvarchar(500)	Sample Full Text.pdf
Mime type	nvarchar(120)	application/pdf
Modified When	datetime	2016-11-03 19:22:47.163
Size in bytes	bigint	
Size in text	nvarchar(50)	146 kB
Type	nvarchar(100)	Full Text

Created When

The time at which the attachment was first created.

Description

The optional description of the attachment, entered by the user at the time of upload. Not all attachments will have this field populated as it is a configurable option to request descriptions at time of upload.

File ID

A reference to the internal File identifier which Elements uses to store the file itself in the operational database. These File IDs are expected to be used in a future API call to allow retrieval of the file itself from Elements.

Filename

The filename of the file attached, as captured at the time of upload.

Mime type

The type of file, in MIME format, as captured at the time of upload.

Modified When

The time at which the attachment was last modified.

Size in bytes

The exact size in bytes of the attached file.

Size in text

The human-readable size of the attached file, formatted for display on reports.

Type

The optional type of the attachment, selected by the user at the time of upload. Not all attachments will have this field populated as it is a configurable option to request choosing a type at time of upload.

5.12.6 [* Certification]

Each row in the various Certification tables represent a single certification associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
Description	nvarchar(200)	(null)
Effective Date	date	
Effective Date Precision ID	int	
Expiry Date	date	
Expiry Date Precision ID	int	
Institution Address Address Hash	varchar(24)	86yjegYMk8Hyipagdt6c4R==
Institution Address City	nvarchar(50)	London
Institution Address Country	nvarchar(50)	United Kingdom
Institution Address Full Address	nvarchar(500)	Imperial College London, Department of Physics, Prince Consort Road, London, SW7 2BB, United Kingdom
Institution Address ISO Country Code	nvarchar(2)	GB
Institution Address Name	nvarchar(100)	(null)
Institution Address Organisation	nvarchar(100)	Imperial College London
Institution Address Postcode	nvarchar(15)	SW7 2BB
Institution Address Privacy Level	nvarchar(32)	Public
Institution Address Region	nvarchar(50)	(null)
Institution Address Street	nvarchar(100)	Prince Consort Road
Institution Address Suborganisation	nvarchar(100)	Department of Physics
Institution Address Type	nvarchar(30)	(null)
Privacy Level	nvarchar(32)	Public
Title	nvarchar(50)	General Management Programme

Description

A textual description of the certification.

Effective Date & Effective Date Precision ID

The effective date and its corresponding precision ID describe the date at which the appointment took or takes effect.

Expiry Date & Expiry Precision ID

The expiry date and its corresponding precision ID describe the date at which the certification expires or expired, if one exists.

Institution Address [*]

The components of the address of the institution, which awarded (or will award) the certification.

Privacy Level

The privacy state of the whole certification: whether it has been made public or private.

Title

The title of the certification.

5.12.7 [* Collaboration Type]

Each row details a type of collaboration associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
Collaboration Type ID	int	1

Collaboration Type ID

The collaboration type is specified by the integer IDs defined in the [Collaboration Type] table.

5.12.8 [* Comment]

Each row in a Comment table holds information entered about an instance of the parent entity.

Column	Type	Example value
[Standard child table columns]		
Comment Text	nvarchar(max)	Guidance on statin prescribing in England and Wales, issued by the National Institute for Health and Care Excellence (NICE) Appraisal Committee in January 2006 was informed by our research report.
Created By	nvarchar(max)	Professor Carl Bender
Created When	datetime	2016-03-20 17:44:45.933
Updated By	nvarchar(max)	Professor Daniel Hook
Updated When	datetime	2016-03-22 11:26:52.221

Comment Text

The text body of a comment.

Created By

The user that created the comment.

Created When

The date and time the user created the comment

Updated By

The user that last updated the comment.

Updated When

The date and time the user last updated the comment

5.12.9 [* Country]

Each row in each Country table specifies a country associated with the parent entity, along with an associated frequency count. For example, the Publication Record Country table details the different countries associated with a publication, and a count of the number of authors per country.

Column	Type	Example value
[Standard child table columns]		
Count	int	2
Country Code	nvarchar(2)	US

Count

The number of associations between the parent entity and this country.

Country Code

The 2-letter ISO code of the country.

5.12.10 [* Custom Value]　`RFS schema`

These child tables exist for each of the Research Funding categories, where they are the immediate children of the [{Category} Record] tables. They contain the values of any custom metadata fields created in a Research Funding Solution (RFS) implementation, i.e. any metadata fields that are not part of the default data model for the category of object. A default Research Funding Solution (RFS) system will contain no custom values.

Note that the RFS categories handle custom fields differently to other categories of object. In other categories, custom fields are added to the list of underlying fields for the category, and are denoted by the prefix $c-$[*].

In contrast, custom field values for RFS objects are listed in these [* Custom Value] tables. Accessing these values will require a join or subquery. Note that a field may be multi-valued. In this case, each value will have its own row in the [* Custom Value] table. You may therefore need to limit or aggregate custom values to produce a result set that contains one row per record or object.

[*] Some older implementations of Elements may have custom fields that do not follow this convention.

Example 1: selecting values of an RFS custom field using a subquery. Suppose that a custom field called "Proposal Funding Type", with data type "String", has been added to the Research Funding Proposal category. The following demonstrates how to select its values using a subquery in the SELECT list. Using TOP(1) and ORDER BY in the subquery limits the result to the first value of the custom field for this record. This ensures that the subquery returns at most one value, at the expense of removing any further values for this custom field from the result set.

```
SELECT  proposal.[Data Source Proprietary ID] AS "GUID"
        ,proposal.[title]
        ,proposal.[project-description]
        ,(  SELECT  TOP(1) cv.[As String]
            FROM    rfs.[Research Funding Proposal Record Custom
Value] cv
            WHERE   -- Use the ID of the proposal's representative
record to find the
                    -- correct custom values
                    cv.[Research Funding Proposal Record ID] =
                        proposal.[Research Funding Proposal
Record ID]
                    -- Also restrict to the desired custom field
                    AND cv.[Name] = 'Proposal Funding Type'
            ORDER BY cv.[Index]
        ) AS "Proposal Funding Type"
FROM    rfs.[Research Funding Proposal] proposal
;
```

Example 2: using STRING_AGG. In SQL Server 2017 and above, the STRING_AGG function provudes a convenient way of concatenating multiple values into a single string. This allows the query to return *all* values of the custom field in a single data field of the result set. It also allows for the use of a join instead of a subquery. Note that a LEFT JOIN is used so that a NULL value for the custom field doesn't remove the row from the result set.

```
SELECT  proposal.[Data Source Proprietary ID] AS "GUID"
        ,proposal.[title]
        ,proposal.[project-description]
        ,STRING_AGG(cv_pft.[As String], '; ')
            WITHIN GROUP (ORDER BY cv.[Index]) AS "Proposal Funding
Type"
FROM    rfs.[Research Funding Proposal] proposal
        LEFT JOIN rfs.[Research Funding Proposal Record Custom Value]
cv_pft
            ON  cv_pft.[Research Funding Proposal Record ID] =
                    proposal.[Research Funding Proposal Record
ID]
                AND cv_pft.[Name] = 'Proposal Funding Type'
;
```

Column	Type	Example value
[Standard child table columns]		
As Bool	bit	(null)
As DateTime	datetime	(null)
As Decimal	decimal(28,6)	(null)
As Guid	uniqueidentifier	(null)
As Integer	int	(null)
As String	nvarchar(max)	Partnership grants
Name	nvarchar(50)	Proposal Funding Type
Type ID	int	1
Type Name	nvarchar(20)	String

As Bool

If this property is a bool, the bool value, otherwise null.

As DateTime

If this property is a DateTime, the DateTime value, otherwise null.

As Decimal

If this property is a decimal, the decimal value, otherwise null.

As Guid

If this property is a GUID, the GUID value, otherwise null.

As Integer

If this property is an integer, the integer value, otherwise null.

As String

A string representation of this property value.

Name

The name of this property.

Type ID

The ID of the data type of this property.

Type Name

The name of the data type of this property.

5.12.11 [* Data] RFS schema

Holds information on all proposal / application form data affiliated with a Research Funding Proposal.

Column	Type	Example value
[Standard child table columns]		
Form GUID	uniqueidentifier	
Grid Name	nvarchar(max)	
Grid Order	int	
Grid Row GUID	uniqueidentifier	
GUID	uniqueidentifier	
Value As Bool	bit	
Value As DateTime	datetime	
Value As Decimal	decimal	
Value As Guid	uniqueidentifier	
Value As Integer	int	
Value As String	nvarchar(max)	
Value Name	nvarchar(50)	
Value Type ID	int	
Value Type Name	nvarchar(20)	

Form GUID

Form GUID.

Grid Name

Form grid name.

Grid Order

Form grid order.

Grid Row GUID

Form grid GUID.

GUID

Dynamic field GUID.

Value As Bool

The value of the dynamic field, if it is of a boolean type.

Value As DateTime

The value of the dynamic field, if it is of a datetime type.

Value As Decimal

The value of the dynamic field, if it is of a decimal type.

Value As Guid

The value of the dynamic field, if it is of a GUID type.

Value As Integer

The value of the dynamic field, if it is of an integer type.

Value As String

The value of the dynamic field, if it is of a string type.

Value Name

The name of the dynamic field.

Value Type ID

The ID of the type of the dynamic field.

Value Type Name

The type of the dynamic field.

5.12.12 [* Degree]

Each row contains details of a degree associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
End Date	date	2007-01-01

End Date Precision ID	int	3
Field of Study	nvarchar(100)	Quantum Statistical Mechanics
Institution Address Address Hash	varchar(24)	jHGpmw69T4fdkguneydo06==
Institution Address City	nvarchar(50)	London
Institution Address Country	nvarchar(50)	United Kingdom
Institution Address Full Address	nvarchar(500)	Imperial College London, London, United Kingdom
Institution Address ISO Country Code	nvarchar(2)	GB
Institution Address Name	nvarchar(100)	(null)
Institution Address Organisation	nvarchar(100)	Imperial College London
Institution Address Postcode	nvarchar(15)	(null)
Institution Address Privacy Level	nvarchar(32)	Public
Institution Address Region	nvarchar(50)	(null)
Institution Address Street	nvarchar(100)	(null)
Institution Address Suborganisation	nvarchar(100)	(null)
Institution Address Type	nvarchar(30)	(null)
Name	nvarchar(100)	PhD
Privacy Level	nvarchar(32)	Public
Start Date	date/td>	(null)
Start Date Precision ID	int	(null)
Supervisor Email	nvarchar(100)	(null)
Supervisor First Initial	nvarchar(3)	D
Supervisor First Name	nvarchar(50)	D
Supervisor Last Name	nvarchar(50)	Brody
Supervisor Middle Initials	nvarchar(11)	(null)
Supervisor Middle Names	nvarchar(100)	(null)
Supervisor Phone number	nvarchar(100)	
Thesis	nvarchar(200)	Phase Transitions in Quantum Microcanonical Equilibrium

End Date & End Date Precision ID

The end date and its corresponding precision ID describe the date at which the degree was completed.

Field of Study

The topic or subject of the degree.

Institution Address [*]

The components of the address of the institution, which awarded (or will award) the degree.

Name

The name of the degree qualification.

Privacy Level

The privacy state of the whole degree: whether it has been made public or private.

Start Date & Start Date Precision ID

The start date and its corresponding precision ID describe the date at which the degree started.

Supervisor [*]

The components of the person who is listed as the supervisor for the degree, if any.

Thesis

The title of the thesis corresponding to the degree, if any.

5.12.13 [* Email Address]

Each row contains details of an email address associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
Address	nvarchar(200)	address@email.com
Privacy Level	nvarchar(32)	Private
Type ID	int	2

Address

The email address

Privacy Level

The privacy status of the individual email address.

Type ID

The integer ID of the type of email address, e.g. Work, Personal, etc.

5.12.14 [* Evidence]

Each row contains details of a piece of evidence associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
Contact	nvarchar(max)	(null)
Date Of Testimonial	date	2016-03-22
Evidence Type	nvarchar(50)	Document
Filename	nvarchar(250)	Letter from Chief medical officer for North Wales.docx
Nature Of Evidence	nvarchar(max)	This letter details the implementation of policies suggested by our research.
Url	nvarchar(500)	(null)

Contact

A person who can be contacted in order to provide evidence.

Date Of Testimonial

The date from which the evidence came into effect.

Evidence Type

The type of evidence: Contact, Document, Url.

Filename

The full filename of the file.

Nature Of Evidence

A description of how the evidence can be used to support or verify a claim.

URL

A publicly accessible URL at which evidence can be accessed.

5.12.15 [* External User Account Item]

Introduced in Elements version 5.19.0 with a single instance, [Publication External User Account Item], this is documented here as a child table to allow for the possibility that objects from other categories (e.g. Grants, Professional Activities, Teaching Activities) may be synchronised to external in the future.

Column	Type	Example value
[Standard child table columns]		
Identifier Account	nvarchar(100)	0000-0001-9746-1193
Identifier Account Scheme	nvarchar(50)	orcid
Identifier Account Scheme ID	int	9
Last Written When	datetime	2020-04-21 16:22:29.893
User ID	int	1842

Identifier Account

The identifier associated with account to which the item was written.

Identifier Account Scheme

The name of the identifier scheme to which the identifier belongs. References `[Identifier Scheme].[Name]`.

Identifier Account Scheme ID

The internal integer ID of the identifier scheme to which the identifier belongs. References `[Identifier Scheme].ID`.

Last Written When

The point in time at which the item was last written (or attempted to be written) to the account associated with the identifier.

User ID

The user who owns the identifier which has the account to which the item was written. References `[User].ID`.

5.12.16 [* Field Setting Override]

Describes the ways in which Units override how their researchers see Supporting Information fields.

Column	Type	Example value
[Standard child table columns]		
Field ID	int	3199
Hidden	bit	0
Instruction	nvarchar(max)	
Supporting Information Type ID	int	2054
Unit ID	int	15

Field ID

The integer ID of the Assessment Supporting Information field being overidden.

Hidden

Whether the field should be hidden from a Unit's researchers.

Instruction

The guidance to display for a field to a Unit's researchers.

Supporting Information Type ID

The integer ID of Supporting Information Type to which this override applies. References the ID column of the Assessment Supporting Information Type table.

Unit ID

The integer ID of the Unit to which this override applies. References the ID column of the Assessment Exercise Definition Unit table.

5.12.17 [* File]

Each row contains details of an externally held file associated with the parent entity. The file is not necessarily held in Elements or an Institutional Repository - the table purely holds file metadata relating to its holding at an external data source.

Column	Type	Example value
[Standard child table columns]		
Checksum	nvarchar(128)	
Checksum Algorithm Type	nvarchar(5)	SHA-1
Created At Source When	datetime	
Data Source	nvarchar(100)	arXiv
Description	nvarchar(400)	
Embargo Description	nvarchar(400)	
Embargo Release Date	date	2008-04-05
File Extension	nvarchar(5)	pdf
File URL	nvarchar(400)	https://arxiv.org/abs/1203.6590v1
File URL Accessibility	nvarchar(40)	Public
File Version	nvarchar(200)	Accepted version
Filename	nvarchar(100)	0507010v2.pdf
Is Held At Source	bit	1
Is Open Access	bit	
MIME Type	varchar(100)	

Proprietary ID	nvarchar(200)	1203.6590
Size	bigint	

Checksum

A checksum value calculate based on the file's contents.

Checksum Algorithm Type

The algorithm used to calculate the Checksum field - expected to be SHA-1 or MD5.

Created At Source When

The date and time at which the file was created *at the data source* - can be set by Repository Tools 2 data sources.

Data Source

The name of the external data source which holds the file.

Description

The description for this file.

Embargo Description

The Embargo description for this file

Embargo Release Date

The Embargo release date name for this file, in YYYYMMDD format

File Extension

The file extension, if one is known.

File URL

A URL at which the file can be found, if one is known.

File URL Accessibility

Identifies whether a File URL is publicly accessibly, privately accessibly or whether the status is unknown. Possible values are NULL, `Public`, `Private`, `Unknown`.

File Version

The data source's view of which version of the publication this file represents (e.g. "Accepted version", "Published version", "Submitted version", "Supporting information").

Filename

The full filename of the file, if one has been provided by the data source.

Is Held At Source

Indicates whether the file location given is held by the data source (as opposed to being in a third-party location).

Is Open Access

Indicates whether the file is available to the public with no restrictions on re-use.

Proprietary ID

An external identifier for the file, unique for the data source.

Size

The size of the file, in bytes, if known.

5.12.18 [* Grant Reference]

Each row in the various Grant Reference child tables represents a single grant reference for a specific set of funding acknowledgements belonging to the parent entity.

Column	Type	Example value
[Standard child table columns]		
Funder Name	nvarchar(300)	(null)
Grant ID	nvarchar(200)	1

Funder Name

The name of the funder for this grant reference.

Grant ID

A reference to the grant ID for this grant reference.

5.12.19 [* Identifier]

Each row in the various [* Identifier] child tables represents a single identifier belonging to the parent entity.

N.B. This does not include the [User Identifier] table and its associated views, [Claimed User Identifier], [Pending User Identifier] and [Declined User Identifier]. These are documented in their respective sections.

Column	Type	Example value
[Standard child table columns]		
Scheme	nvarchar(50)	pmc
Scheme ID	int	1
Value	nvarchar(100)	PMC3324822

Scheme

The scheme the identifier is associated with. Some identifiers do not belong to any known scheme, in which case this value will be NULL.

Scheme ID

The internal integer ID of the scheme the identifier is associated with. Some identifiers do not belong to any known scheme, in which case this value will be NULL. When not null, references `[Identifier Scheme].ID`.

Value

The value of the identifier.

5.12.20 [* ISSN]

Each row in the an ISSN child table represents a single ISSN in the issn-list field associated with a record. Although the mechanism is general and matches other child tables, there is only a single ISSN table: [Journal Record ISSN].

Column	Type	Example value
[Standard child table columns]		
Value	nvarchar(9)	0000-0019

5.12.21 [* Label]

Each row in the various Label tables store labels associated with the parent entity. Each entity can have multiple labels attached to it. Labels can belong to label schemes, with fixed or editable vocabularies.

Label schemes are listed in "Label Scheme" table. If a scheme has an associated controlled vocabulary, it can be found in the "Label Vocabulary" table.

Column	Type	Example value
[Standard child table columns]		
Label	nvarchar(200)	Emergency & Critical Care Medicine
Scheme ID	int	14
Percentage	decimal	(null)

Label

The label value.

Scheme ID

The internal integer ID of the Label Scheme to which the label belongs. NULL for labels not belonging to a scheme. When not null, references `[Label Scheme].ID`

Percentage

The percentage associated with this label on the parent entity.

5.12.22 [* Language Competency]

Each row contains details of a language competency associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
Can Peer Review	bit	0
Can Read	bit	0
Can Speak	bit	1
Can Understand Spoken	bit	1
Can Write	bit	0
Language Code	nvarchar(3)	tlh
Language Name	nvarchar(150)	Klingon; tlhIngan-Hol
Privacy Level	nvarchar(32)	Public

Can [*]

Each column of the form [Can *] describes the different abilities associated with the language competency, where 1 indicates that ability is present, and 0 indicates that the ability is not.

Language Code

The ISO code of the language.

Language Name

The name of the language.

Privacy Level

The privacy status of the language competency.

5.12.23 [* Manager]

Records which users are managers for objects in the parent table. For example, the [Assessment Exercise Definition Unit Manager] table details which users are assigned the Manager role for the various Assessment Exercise Definition Units.

Column	Type	Example value
[Standard child table columns]		
User ID	int	3827

User ID

The integer ID of the user to whom the manager role is assigned. References `[User].ID`.

5.12.24 [* Non-Academic Employment]

Each row contains details of a non-academic employment associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
Employer Address Address Hash	varchar(24)	n48hdyMQQ5jndionrkjs8Y==
Employer Address City	nvarchar(50)	London
Employer Address Country	nvarchar(50)	United Kingdom
Employer Address Full Address	nvarchar(500)	Symplectic Ltd., 4 Crinan Street, London, N1 9XW, United Kingdom
Employer Address ISO Country Code	nvarchar(2)	GB
Employer Address Name	nvarchar(100)	(null)
Employer Address Organisation	nvarchar(100)	Symplectic Ltd.
Employer Address Postcode	nvarchar(15)	N1 9XW
Employer Address Privacy Level	nvarchar(32)	Public
Employer Address Region	nvarchar(50)	(null)
Employer Address Street	nvarchar(100)	4 Crinan Street
Employer Address Suborganisation	nvarchar(100)	(null)
Employer Address Type	nvarchar(30)	(null)
End Date	date	(null)
End Date Precision ID	int	(null)
Position	nvarchar(200)	CEO

Privacy Level	nvarchar(32)	Public
Start Date	date	2013-01-01
Start Date Precision ID	int	3

Employer Address [*]

The components of the address of the employer.

End Date & End Date Precision ID

The end date and its corresponding precision ID describe the date at which the employment ended.

Position

The position held during the employment.

Privacy Level

The privacy state of the whole degree: whether it has been made public or private.

Start Date & Start Date Precision ID

The start date and its corresponding precision ID describe the date at which the employment began.

5.12.25 [* Non-Compliance Reason]

When the Open Access Monitor calculates that a Publication is not compliant with an OA Policy for which it is eligible, this table will contain a row indicating the reason for non-compliance (as calculated by the OA Monitor).

Column	Type	Example value
[Standard child table columns]		
Value	nvarchar(200)	Missing effective date - could not determine deposit deadline

Value

The reason for non-compliance calculated by the OA Monitor.

5.12.26 [* OA Policy]

This table records which OA Policy is applied to the parent entity.

Column	Type	Example value
[Standard child table columns]		
Compliance Status	nvarchar(100)	Compliant
Compliance Status Is Overridden	bit	1
Compliance Status Override Reason	nvarchar(max)	Known to be compliant via full text in PubMed Central.
Compliance Status Without Override	nvarchar(100)	Non-compliant
OA Policy ID	int	5

Compliance Status

Identifies whether the publication is compliant, not compliant or pending compliance for the identified OA Policy. A publication which falls under multiple policies could have different compliance statues for each policy.

Note: Pending compliance means that a publication meets all compliance settings, but is embargoed and lacks a publication date so Elements cannot determine the embargo of acceptable length; once a publication date is added the item will become either compliant or not compliant.

Compliance Status Is Overridden

Indicates whether or not the Compliance Status has been overridden, e.g. by a research administrator.

Compliance Status Override Reason

If this status is overridden, this will contain any notes entered by the user who set the override.

Compliance Status Without Override

The publication's compliance status when it is not overridden, i.e. the compliance status as calculated by OA Monitor. This column is populated whether or not an override is in effect.

OA Policy ID

The integer ID of the policy to which this relates. References `[OA Policy].ID`

> **N.B.** Up to and including version 5.14.1 of Elements, this column was simply called `ID`. In version 5.15.0, it was renamed `Policy ID` to make way for the `ID` column required to identify rows of this table in its new child tables. In version 5.19.0, this column was re-named again to `OA Policy ID`, in line with conventions used elsewhere in the Reporting Database.

5.12.27 [* OA Policy Exception]

Publications can be marked with an 'OA Policy Exception', which identifies a reason that the publication is not expected to comply with an OA policy. The exception consists of the exception type and a justifying comment (see `OA Policy Exception Comment`). This table lists the applied exceptions.

Column	Type	Example value
[Standard child table columns]		
Type	nvarchar(100)	Deposit6
Comment	nvarchar(max)	Published as gold open access in 'Nature Communications'.

Type

The code for the exception type. Exception types are managed on the 'Open Access monitor settings' page in *Elements*.

Comment

A comment added by the administrator who applied the exception. May be explanatory, or may highlight questions and issues around the exception.

5.12.28 [* OA Policy Exclusion]

Where an object has been excluded from an Open Access Policy, this table will contain a row summarising the exclusion.

Column	Type	Example value
[Standard child table columns]		
OA Policy ID	int	5

OA Policy ID

The integer ID of the OA Policy from which the Publication is excluded. References `[OA Policy].ID`.

> **N.B.** On its introduction in Elements version 5.15.0, this column was called "Value". In version 5.19.0, it was renamed "OA Policy ID", in line with conventions used elsewhere in the Reporting Database.

5.12.29 [* Person]

Each row in the various Person child tables represents a single person belonging to the parent entity.

Column	Type	Example value
[Standard child table columns]		
Email	nvarchar(100)	(null)
First Initial	nvarchar(3)	J
First Name	nvarchar(50)	James
Last Name	nvarchar(50)	Kirk
Middle Initials	nvarchar(11)	T
Middle Names	nvarchar(50)	Tiberius
Phone number	nvarchar(100)	01354 153021
Resolved User ID	int	

Email

An email address which is associated with the person.

First Initial

The leading characters of the first names.

First Name

The first names of the person.

Last Name

The last names of the person.

Middle Initials

The leading characters of the middle names.

Middle Names

The middle names of the person.

Phone number

Phone number of the person.

Resolved User ID

Indicates which user of the system corresponds to each name in publication author lists. These correspondences are refreshed automatically using a "best guess" algorithm in a background queue of work, and may therefore not always be 100% timely and accurate.

5.12.29.1 Research Funding Proposal Record Person RFS schema

In addition to the standard [* Person] fields, the Research Funding Proposal Record Person table contains a number of additional fields, specific only to this table

Column	Type	Example value
CV GUID	uniqueidentifier	
CV URL	nvarchar(max)	
FTE	decimal	

CV GUID

GUID of the CV attached to the Proposal

CV URL

URL of the CV attached to the Proposal

FTE

FTE input on the Proposal

5.12.30 [* Phone Number]

Each row in the various Phone Number child tables represents a phone number belonging to the parent entity.

Column	Type	Example value
[Standard child table columns]		
Extension	varchar(32)	4422
Number	varchar(32)	(951) 827-3266
Privacy Level	nvarchar(32)	Public
Type ID	int	1

Extension

The extension number, if any.

Number

The phone number.

Privacy Level

The privacy status of this phone number.

Type ID

The integer type identifier of this phone number, e.g. Work, Mobile, etc.

5.12.31 [* Photo]

Each row in a Photo table holds an uploaded photo, for example, for a user.

Column	Type	Example value
[Standard child table columns]		
Photo File Extension	nvarchar(4)	jpeg
Photo Mime Type	nvarchar(15)	Image/png
Profile Photo	nvarchar(max)	

Photo File Extension

The file extension of the uploaded file, not including the dot.

Photo Mime Type

The MIME type of the uploaded file.

Profile Photo

The uploaded photo, in base64 encoding.

5.12.32 [* Postgraduate Training]

Each row contains details of a postgraduate training associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
End Date	date	2007-01-01
End Date Precision ID	int	3
Institution Address Address Hash	varchar(24)	hH7j37di90h32hFt3Mz7gh==
Institution Address City	nvarchar(50)	London
Institution Address Country	nvarchar(50)	United Kingdom
Institution Address Full Address	nvarchar(500)	Imperial College London, London, United Kingdom
Institution Address ISO Country Code	nvarchar(2)	GB
Institution Address Name	nvarchar(100)	(null)
Institution Address Organisation	nvarchar(100)	Imperial College London
Institution Address Postcode	nvarchar(15)	(null)
Institution Address Privacy Level	nvarchar(32)	Public
Institution Address Region	nvarchar(50)	(null)
Institution Address Street	nvarchar(100)	(null)
Institution Address Suborganisation	nvarchar(100)	(null)
Institution Address Type	nvarchar(30)	(null)
Privacy Level	nvarchar(32)	Public
Specialisation	nvarchar(200)	(null)
Start Date	date	(null)
Start Date Precision ID	int	(null)
Supervisor Email	nvarchar(100)	(null)
Supervisor First Initial	nvarchar(3)	D
Supervisor First Name	nvarchar(50)	D
Supervisor Last Name	nvarchar(50)	Brody
Supervisor Middle Initials	nvarchar(11)	(null)

Supervisor Middle Names	nvarchar(100)	(null)
Supervisor Phone number	nvarchar(100)	
Title	nvarchar(200)	(null)
Type ID	int	1

End Date & End Date Precision ID

The end date and its corresponding precision ID describe the date at which the training was completed.

Institution Address [*]

The components of the address of the institution at which the training took place, or will take place.

Privacy Level

The privacy state of the training: whether it has been made public or private.

Specialisation

A description of the specialisation of this postgraduate training.

Start Date & Start Date Precision ID

The start date and its corresponding precision ID describe the date at which the training started.

Supervisor [*]

The components of the person who is listed as the supervisor for the training, if any.

Title

The title of the postgraduate training, if any.

Type ID

The integer ID of the type of this postgraduate training.

5.12.33 [* REF OA Policy]

Applicable to UK institutions submitting to the REF 2021 assessment. This table records which REF OA Policy is applied to the parent entity.

Column	Type	Example value
[Standard child table columns]		
Compliance Status	nvarchar(100)	Pending Compliance
First Deposited When	datetime	2018-07-24
OA Policy ID	int	3
REF OA Status	nvarchar(40)	Access exception

Compliance Status

The compliance status of the publication, with the authorship requirement ignored in the calculation.

First Deposited When

Date of first deposit.

OA Policy ID

ID of applicable Open Access policy. References `[OA Policy].ID` .

REF OA Status

REF Open Access compliance status. Possible values are:

- Compliant
- Not compliant
- Deposit exception
- Access exception
- Technical exception
- Other exception
- Out of scope
- Exception within 3 months of publication

5.12.34 [* Review]

The review tables hold reviews of items, lists or exercises, entered by reviewers within the Assessment module.

Column	Type	Example value
[Standard child table columns]		
Created When	datetime	
Modified When	datetime	
Reviewer ID	int	243
Score ID	int	94
Stage ID	int	2
Text	nvarchar(max)	This is some text representing a review.

Created When

The time at which a review was first created.

Modified When

The time a review was last modified.

Text

The text of the review.

Reviewer ID

The user ID of the reviewer who added this review - can be joined to the User tables to retrieve reviewer name and other details.

Stage ID

The ID of the stage definition in which this review was added - can be joined to the Assessment Stage Definition table to retrieve stage name.

5.12.35 [* Reviewable Component]

Column	Type	Example value
[Standard child table columns]		
Exercise Def ID	int	
Item Def ID	int	
List Def ID	int	

Exercise Def ID

The identifier of a reviewable exercise definition. An entry in this table with this field set means review is enabled at exercise level for this exercise definition.

Item Def ID

The identifier of a reviewable item. An entry in this table with this field set means review is enabled at item level for the exercise definition with this item definition.

List Def ID

The identifier of a reviewable list. An entry in this table with this field set means review is enabled at list level for the exercise definition with this list definition.

5.12.36 [* Reviewer Assignment]

Column	Type	Example value
[Standard child table columns]		
Group ID	int	
Reviewer ID	int	
User ID	int	

This table contains rows to indicate which reviewers can been defined for a given stage

Group ID

The group ID of the group the reviewer is reviewing (could be blank).

Reviewer ID

The user ID of the reviewer.

User ID

The use ID of the user the reviewer is reviewing (could be blank).

5.12.37 [* Reviewer Status]

This table contains rows to indicate a reviewer's status with respect to an exercise, list or item in a particular stage.

Column	Type	Example value
[Standard child table columns]		
Last Affected	datetime	
Reviewer ID	int	
Reviewer Status	nvarchar(50)	Marked done
Stage ID	int	

Last Affected

The time at which the status was last modified by the reviewer.

Reviewer ID

The ID of the user whose status is being indicated.

Reviewer Status

The current status being indicated. Possible values are "Needs attention", "In progress" and "Marked done".

Stage ID

The ID of the exercise stage which this status is for.

5.12.38 [* Role]

These child tables surface the role subfield associated with person data.

Column	Type	Example value
[Standard child table columns]		
Role	nvarchar(50)	Actor
Type	nvarchar(30)	Creative

Role

The role that the person had or has in relation to the parent object.

Type

The type of role: may be 'Creative' or 'Contributor'. 'Contributor'-type roles are taken from the CASRAI CRediT list of contributor roles. 'Creative'-type roles are suitable for creative and artistic productions.

5.12.39 [* Score]

This table contains rows to detail the scores which comprise a scoreset.

Column	Type	Example value
[Standard child table columns]		
Description	nvarchar(500)	Apply this score to exceptional outputs which have had remarkable impact on their field.
Name	nvarchar(20)	Outstanding
Numerical Value	decimal	
Sort	int	

Description

Some text that gives extra information about a particular score (could be blank).

Name

The label for the score.

Numerical Value

The value to use for this score when reporting (could be blank).

Sort

A value indicating the relative ordering to use when displaying multiple scores from the same scoreset.

5.12.40 [* Scoreset]

This table contains rows to describe a scoreset defined as part of an exercise definition.

Column	Type	Example value
[Standard child table columns]		
Name	nvarchar(20)	Impact Rating

Name

The label for the scoreset

5.12.41 [* Small Text]

The various Small Text tables hold lists of textual values associated with the parent entity. For example, a Publication Record can have multiple specified "types", each of which will appear as a row in the Publication Record Small Text table under the property "types".

Column	Type	Example value
[Standard child table columns]		
Value	nvarchar(200)	Journal Article

Value

The textual value of the item in the list.

5.12.42 [* Stage]

Column	Type	Example value
[Standard child table columns]		
Hidden to Researcher	bit	0
Locked to Researcher	bit	1
Name	nvarchar(100)	Departmental Review
Researcher Can Mark As Done	bit	1
Researcher Can See Reviewer Names	bit	1
Researcher Can See Reviews	bit	0
Sort	int	3

This table contains rows for the stages defined as part of exercise definition, and includes details of review levels and visibility.

Hidden to Researcher

True if the contents of the exercise is hidden to the researcher in this stage.

Locked to Researcher

True if the contents of the exercise is locked (i.e. read-only) to the researcher in this stage (by default, this can be over-ridden per exercise via Manager screen).

Name

The name of the stage

Researcher Can Mark As Done

If this is true, then the researcher will be shown the Mark As Done button

Researcher Can See Reviewer Names

If this is true, then the researcher will see the names of reviewers for reviews created in this stage.

Researcher Can See Reviews

If this is true, then the researcher will see the contents of reviews created in this stage.

Sort

The order of the stage within drop-down lists and on screen within the administration page.

5.12.43 [* Tag]

Lists tags associated with the parent, e.g. tags applied to Assessment Exercise Definitions to assist with their administration and reporting on them.

Column	Type	Example value
[Standard child table columns]		
Tag	nvarchar(30)	REF2021

Tag

The tag associated with the parent.

5.12.44 [* Transition]

Column	Type	Example value
[Standard child table columns]		
Destination Stage ID	int	1
Source Stage ID	int	2
Transition Type	nvarchar(20)	User

This table contains one row for each user-initiated transition from one stage to another.

Destination Stage ID

The ID of the destination stage. Can be joined to the Assessment Stage table to retrieve name and other details.

Source Stage ID

The ID of the source stage. Can be joined to the Assessment Stage table to retrieve name and other details.

Transition Type

This will be either "User" or "Any reviewer" according to who is allowed to make this transition.

5.12.45 [* Unit]

A Unit is a refinement of an Assessment Exercise Definition, allowing the exercise definition to be tailored for a particular type of researcher. The [Assessment Exercise Definition Unit] table reports on various aspects of a Unit. Many of the columns are specific to the UK REF2021 Assessment Exercise.

REF6b approved reduction in outputs

Column	Type	Example value
[Standard child table columns]		
Description	nvarchar(100)	
Is Default Unit	bit	1
Name	nvarchar(20)	
REF Edit Rights Restricted	bit	0
REF Notes On Number Of Required REF2 Outputs	nvarchar(max)	
REF OA Policy ID	int	7
REF1 Researchers Allowed Allocations To Multiple Research Groups	bit	1
REF1 Researchers Category A FTE Override	decimal	
REF2 Output Subprofile Categories Enabled	bit	
REF2 Outputs Assignable To Research Groups	bit	
REF6b Approved Reduction In Outputs	int	
Subdescription	nvarchar(100)	

Description

A description for the Unit.

Is Default Unit

Whether the Unit is the default one for its exercise definition. Users not specifically allocated to a unit will belong to the default unit.

> **N.B.** This column was introduced as [IsDefaultUnit] in Elements 5.13.0. In Elements 5.14.0 it was renamed [Is Default Unit], in line with the style of other Reporting Database columns. Please make sure that any saved queries are modified accordingly.

Name

A name for the Unit, unique within this exercise definition.

REF Edit Rights Restricted

Indicates whether the Unit has been locked for editing by Unit Managers.

REF Notes On Number Of Required REF2 Outputs

Notes about the number of REF2 outputs that are required for this Unit.

REF OA Policy ID

Applicable to UK institutions using the OA Monitor for the REF 2021 assessment. References `[OA Policy].ID`.

REF1 Researchers Allowed Allocations To Multiple Research Groups

Whether REF1 Researchers are allowed to be assigned to more than one research group.

REF1 Researchers Category A FTE Override

The value (if any) of the manual override for the Submitted Category A Full Time Equivalent.

REF2 Output Subprofile Categories Enabled

REF Units of Assessment 3 and 12 only. Whether output sub-profile categories are enabled.

REF2 Outputs Assignable To Research Groups

Whether Staff Output links to REF2 outputs are allowed to be assigned research groups.

REF6b Approved Reduction In Outputs

REF6b approved reduction in outputs.

Subdescription

A space for an optional further description in case one is required.

5.12.46 [* Unit Membership]

Each row details the membership of one User for one Unit. Analogous to the [Group User Membership] table.

Column	Type	Example value
[Standard child table columns]		
Unit ID	int	15
User ID	int	3762

Unit ID

The integer ID of the Unit, referencing the ID column of the corresponding [* Unit] table.

User ID

The integer ID of a user who is a member of the Unit, referencing the ID column of the User table.

5.12.47 [* Unit Override]

These tables detail the ways in which Units override the default settings of the parent objects.

Column	Type	Example value
[Standard child table columns]		
Unit ID	int	15
Value	nvarchar(max)	
Reviewer Guidance Default Value	nvarchar(max)	

Unit ID

The ID number of the Unit being overridden, as defined in the corresponding [* Unit] table.

Value

The value to which a Unit has overriden a setting.

Reviewer Guidance Default Value

The value to which a Unit has overriden the Reviewer Guidance Default Value.

5.12.48 [* Web Address]

Each row details a single website address associated with the parent entity.

Column	Type	Example value
[Standard child table columns]		
Label	nvarchar(200)	Twitter account
Privacy Label	nvarchar(32)	Public
Type ID	int	6
URL	nvarchar(max)	https://twitter.com/Breezier

Label

A label supplied alongside the URL, if any.

Privacy Label

The privacy status of the web address.

Type ID

The integer ID of the type of this web address.

URL

The URL of the website.

5.13 Fixed tables

Fixed tables are those which appear only once in the reporting database, without a generalised repeated structure across multiple tables.

5.13.1 [Address]

Each row represents a unique address that exists in the Elements system. Uniqueness is defined by the "Full Address" string. The GRID columns represent data resolved from GRID corresponding to these Full Address strings.

Column	Type	Example value
Address Hash	varchar(24)	
Full Address	nvarchar(1000)	
GRID ID	nvarchar(20)	
GRID Institution Link	nvarchar(200)	
GRID Institution Name	nvarchar(200)	
GRID Institution Type	nvarchar(50)	
GRID Latitude	decimal	
GRID Longitude	decimal	

Address Hash

A hash of the value in the Full Address column. This is useful to JOIN this table with [* Address] tables and other tables containing address information.

Full Address

The full address that created the hash.

GRID ID

A GRID ID uniquely identifies an institution. This is the GRID ID that Elements has matched to the value in the Full Address column. Due to the non-standard nature of Address information, there is a small possibility that this match may occasionally be incorrect.

For more information about GRID, see www.grid.ac

GRID Institution Link

A link to the website of the institution corresponding to the GRID ID

GRID Institution Name

The name of the institution corresponding to the GRID ID.

GRID Institution Type

The type of the institution corresponding to the GRID ID.

GRID Latitude

The latitude of the institution corresponding to the GRID ID (to 6 decimal places).

GRID Longitude

The longitude of the institution corresponding to the GRID ID (to 6 decimal places).

5.13.2 [Agent Type]

This table lists the different types of agent that can act on objects and links in Elements, for example by claiming or rejecting publications and grants. These agent types are referenced in several places where such actions are recorded, for example the [Link] table, [{Category} {Category} Relationship] tables, [Pending {Category}] tables, and [Declined {Category}] tables.

Column	Type	Example value
ID	int	2
Display Name	nvarchar(200)	Elements (online user search)
Is System Agent	bit	1
Name	nvarchar(200)	user-search

ID

The integer ID of the agent type.

Display Name

The display name of the agent type, as used in the user interface and elsewhere.

Is System Agent

Whether agents of this type are internal Elements processes.

Name

The internal name of the agent type.

5.13.3 [API Account]

Lists the accounts registered for access to the Elements API.

Column	Type	Example value
ID	int	12
Username	nvarchar(32)	fredsApiAccount

ID

The internal integer ID of the API account.

Username

The username for the API account.

5.13.4 [Assessment Exercise]

Each row defines a specific instance of an exercise, containing the "response" from a given user to an assessment exercise definition. Each row has properties defined by the exercise definition. Each user can have at most one exercise per exercise definition.

Column	Type	Example value
ID	Int	1
attachments hash	varchar(24)	y4fgeH7G31midsDoldhb2h==
Contents User Lock	nvarchar(20)	Editable
Created When	datetime	2016-03-21 23:45:29.627
Current Stage	nvarchar(50)	In draft
Current Stage User Status	Nvarchar(50)	In progress
Definition ID	Int	7
Last Marked As Ready By User When	datetime	2017-04-05 13:22:13.097
Last Updated By User	datetime	2017-04-05 12:57:45.835
reviewerstatuses hash	varchar(24)	H7G3idhb2h3mf90dsy4fge==

reviews hash	varchar(24)	omflu7mS1Z8x2IGq8GiwcQ==
Started By User When	datetime	2017-04-02 08:58:19.346
Supporting Information ID	int	331068
User ID	int	279

ID

The database ID of the Assessment Exercise. Note that this refers to one particular exercise instance (not the Assessment Exercise Defintion).

attachments hash

A hash of this exercise's data within the Assessment Exercise Attachment child table. This is used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection).

Used internally within the reporting synchroniser to track changes to attachments at exercise level.

Contents User Lock

Indicates whether the assessment exercise contents are Editable, or Viewable, or Hidden by/to the user.

Created When

When was this exercise created? This date may not be when the user clicked start, the exercise may have been created by a manager moving into a stage other than the first one.

Current Stage

The name of the current exercise stage, typically a reference to either an edit/prepare stage, or to a round of review.

Current Stage User Status

The status of this exercise in the current stage, that is to say the status of this user's response. This field will contain one of the pre-determined exercise statuses "In progress" or "Marked as done".

Definition ID

The ID of the exercise definition.

Last Marked As Ready By User When

The date and time when the user last marked the exercise as ready for the next stage (or, from 5.6 onwards moved the exercise to a different stage)

Last Updated By User

The date and time that any component of the exercise, its lists or items, supporting information or attachments were updated by the user.

reviewerstatuses hash

A hash of this exercise's data within the Assessment Exercise Reviewer Status child table. This is used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection).

reviews hash

A hash of this exercise's data within the Assessment Exercise Review child table. This is used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection).

Used internally within the reporting synchroniser to track changes to reviews at exercise level.

Started By User When

The date and time when a researcher has actively pressed a button to start an exercise within Elements.

Supporting Information ID

If the exercise definition specifies that an exercise needs supporting information, then this will be the ID of the supporting information object that holds the supporting information for this exercise. Note that this is the supporting information at the level of the whole exercise; lists and items / selections belonging to this exercise may have their own supporting information objects. Also note that this can be NULL even if supporting information is required, meaning no supporting information has yet been supplied.

User ID

The ID of the user to whom the exercise belongs.

5.13.5 [Assessment Exercise Definition]

Each row details a definition of a whole assessment exercise. The properties of individual assessment exercises, each belonging to user of the system, will be defined by the properties of these definitions rows (and of properties belonging to direct children of this table, which are list definitions followed by item definitions).

Note that there are a number of common definition settings (for attachments, and for the review settings) which exist in exactly the same fields at each of the three exercise, list and item definitions.

Column	Type	Example value
ID	int	7
Active	bit	1
Archived	bit	0
Attachments Description Enabled	bit	0
Attachments Enabled	bit	0
Exercise Definition ID	int	7
Is REF	bit	1
Name	nvarchar(100)	REF Stock-take
Overall REF Scoreset ID	int	12
REF1 Researcher Edit Rights Restricted	bit	0
REF2 Open Access Manager Role Enabled	bit	1
Researcher Guidance Default Value	nvarchar(max)	Build up your Evidence Portfolio (EP). Select your best 4 items as Nominated Research Outputs (NROs) and craft a statement about your contribution for each of these items.
Reviewer Guidance Default Value	nvarchar(max)	Review the entirety of the researcher's Evidence Portfolio, including selections and supporting information.
Supporting Information Type ID	int	71

ID

The ID of the assessment exercise definition.

Active

Whether the assessment exercise definition is active or not.

Archived

Whether the assessment exercise definition is archived or not.

Attachments Description Enabled

Are attachment descriptions requested at time of upload?

Attachments Enabled

Are attachments configured to be allowed at the overall exercise level?

Exercise Definition ID

The ID of the assessment exercise definition.

Is REF

Whether this Assessment Exercise Definition is for the United Kingdom's Research Excellence Framework 2021 exercise.

Name

The name of the assessment exercise definition.

Overall REF Scoreset ID

References `[Assessment Exercise Definition Scoreset].ID`.

REF1 Researcher Edit Rights Restricted

Indicates whether all REF1 Researcher data in the exercise definition is read-only for particular roles.

REF2 Open Access Manager Role Enabled

Whether the REF2 Open Access Manager Role is enabled for the exercise.

Researcher Guidance Default Value

The HTML guidance text to be displayed for this exercise to researchers whose Unit does not override this guidance.

Reviewer Guidance Default Value

The HTML guidance text to be displayed for this exercise to reviewers of exercises owned by researchers whose Unit does not override this guidance.

Supporting Information Type ID

The ID of the type of object used to hold supporting information for an individual assessment exercise.

5.13.6 [Assessment Exercise Definition REF Default Output Type Mapping]

Contains a list of mappings between Publication Types and Default Output Type for REF2021 Assessment Exercises. For example, Journal Articles (Publication Type 5) may by default be assigned a REF Output Type of D (Journal article).

N.B. Strictly speaking, this is a member of a child table group, [* REF Default Output Type Mapping]. However, the child table group has, and will only ever have a single member, which is a child of [Assessment Exercise Definition]. It is therefore documented here as a fixed table.

Column	Type	Example value
Assessment Exercise Definition ID	int	5
Property	nvarchar(100)	
Index	int	0
Assessment REF2 Output Type ID	nvarchar(1)	D
Publication Type ID	int	5

Assessment Exercise Definition ID

Standard child table column. References `[Assessment Exercise Definition].ID`.

Property

Standard child table column. Not used in this table; will always contain an empty string (i.e. `''`, not a NULL value).

Index

Standard child table column. The zero-based position of this row amongst all rows for the parent object.

Assessment REF2 Output Type ID

The ID of the default output type that the publication type is mapped to. References `[Assessment REF2 Output Type].ID`.

Publication Type ID

The ID of the publication type that maps to the output type. References `[Publication].ID`.

5.13.7 [Assessment Exercise Definition REF Output Submission Status]

For each REF assessment exercise definition, lists the allowed values for the submission status of a REF2 output to the REF system. These are configured in the "REF2 Electronic / Physical output submission management" section of the Assessment Exercise's definition page.

N.B. Synchronisation of this table is not immediate. Changes to allowed submission status values may take approximately an hour to appear in the Reporting Database.

Column	Type	Example value
Assessment Exercise Definition ID	int	36
Property	nvarchar(100)	
Index	int	3
ID	int	4
Display Name	nvarchar(75)	Physical copy requested
Sort	int	3

Assessment Exercise Definition ID

Identifies the Assessment Exercise Definition to which this relates. References `[Assessment Exercise Definition].ID`

Property

Standard child table column.

Index

Standard child table column.

ID

An integer ID for this REF Output Submission Status.

Display Name

The display name for the REF Output Submission Status.

Sort

The sort order of the REF Output Submission Status.

5.13.8 [Assessment Exercise Definition Role Assignment]

Contains details of the roles to which users and/or groups have been assigned in Assessment Exercise Definitions. Each row refers to an assignment of either a user or group, so exactly one of User ID and Group ID will be non-NULL.

Column	Type	Example value
Assessment Exercise Definition ID	int	3
Index	int	0
Property	nvarchar(100)	User
ID	bigint	372
Group ID	int	15
User ID	int	(null)

Assessment Exercise Definition ID

The integer ID of the Assessment Exercise Definition to which this Role Assignment relates.

Index

Standard child table column. The position of this Role Assignment within the list of Role Assignments for the Assessment Exercise Definition to which it relates. Zero-based, i.e. the first Role Assignment has index 0.

Property

The property list to which this Assignment belongs. Represents the role assigned to the user or group, e.g. "User", "Manager". See 5.12 Child tables for more information.

ID

The sequential integer ID for this row in table.

Group ID

Integer ID of the group to which the role is assigned. Either this column or `User ID` will be NULL. References `[Group].ID`.

User ID

Integer ID of the user to whom the role is assigned. Either this column or `Group ID` will be NULL. References `[User].ID`.

5.13.9 [Assessment Exercise Definition Unit Excluded Score Override]

Lists scores that have been hidden in an Assessment Exercise Definition Unit. Scores listed here are not available to reviewers for the given units. When the scoreset has been selected as the Overall scoreset for the exercise, the hidden scores will not be available in the given unit.

N.B. Synchronisation of this table is not immediate. Changes to unit overrides may take approximately an hour to appear in the Reporting Database.

Column	Type	Example value
Assessment Exercise Definition ID	int	5
Property	nvarchar(100)	
Index	int	0
Score ID	int	6
Unit ID	int	34

Assessment Exercise Definition ID

Identifies the Assessment Exercise Definition to which this relates. References `[Assessment Exercise Definition].ID`.

Property

Standard child table column.

Index

Standard child table column.

Score ID

The integer ID of the disabled Score in Unit Scoreset override. References `[Assessment Exercise Definition Scoreset Score].ID`.

Unit ID

Identifies the Unit to which this relates. References `[Assessment Exercise Definition Unit].ID`

5.13.10 [Assessment Exercise Definition Unit REF Research Group]

A list of all Research Groups assigned to REF1 Researcher contracts in the Unit.

Column	Type	Example value
Assessment Exercise Definition Unit ID	int	24
Index	int	0
Property	nvarchar(100)	
ID	int	16
Code	nvarchar(1)	A
Name	nvarchar(128)	Education Research Group

Assessment Exercise Definition Unit ID

References `[Assessment Exercise Definition Unit]`.ID

Property

Standard child table column. Not used in this table; will always contain an empty string (i.e. `''`, not a NULL value).

Index

Standard child table column. The zero-based position of this row amongst all rows for the parent object.

ID

A unique integer ID for this row in the table. Can be used in other tables to reference this row.

Code

The character identifier of the Research Group. This is unique within the unit.

Name

The name of the Research Group.

5.13.11 [Assessment Exercise Definition Unit REF2 Output Count Required]

Values used to calculate the required number of REF2 Outputs as well as the number of Outputs to be input directly into the REF submission system.

When introduced in Elements 5.19.0, this view contained all units, including default units. This resulted in poor performance, in particular frequently causing the "Data Flags" dashboard to time out when loading. This behaviour was retained in early releases of Elements 5.20.0. In the 5.20.0.2685 patch release, this view was altered to exclude default units, in order to improve performance.

Column	Type	Example value
Assessment Exercise Definition Unit ID	int	16
Submitted Category A FTE Of Included REF1 Researchers	decimal(38,6)	83.7
Number Of Outputs Directly Input Into REF Submission System	int	23
Number Of Included REF1 Researchers With Zero Attributions Expected	int	7
Initial Calculated Number Of Required REF2 Research Outputs	numeric	209.25
Initial Calculated Number Of Required REF2 Research Outputs (rounded)	int	209
Required Number Of REF2 Research Outputs	int	198

Assessment Exercise Definition Unit ID

References `[Assessment Exercise Definition Unit]`.ID

Submitted Category A FTE Of Included REF1 Researchers

The sum of the submitted Category A FTEs of REF1 Researchers included in the submission for this Unit.

> **N.B.** When introduced in Elements version 5.19.0, this column was named `Submitted Category A FTE`. The name was changed in Elements 5.20.0 to more accurately reflect its function.

Number Of Outputs Directly Input Into REF Submission System

A count of REF2 Outputs for REF1 Researchers included in the submission for this unit that will be (or have been) input directly into the REF submission system (i.e. REF2 Outputs not submitted via Elements).

Number Of Included REF1 Researchers With Zero Attributions Expected

A count of REF1 Researchers who are included in the submission for this Unit and who have zero attributions expected.

> **N.B.** When introduced in Elements version 5.19.0, this column was named `Number Of REF1 Researchers With Zero Attributions Expected`. The name was changed in Elements 5.20.0 to more accurately reflect its function.

Initial Calculated Number Of Required REF2 Research Outputs

The raw, unrounded initial calculated number of required REF2 Research Outputs for the Unit. Equal to `Submitted Category A FTE` × 2.5

> **N.B.** When introduced in Elements version 5.19.0, this column was named `Required Number Of REF2 Research Outputs (raw calculation)`. The name was changed in Elements 5.20.0 to more accurately reflect its function.

Initial Calculated Number Of Required REF2 Research Outputs (rounded)

The initial calculated number of required REF2 Research Outputs for the Unit, rounded to the nearest integer.

> **N.B.** When introduced in Elements version 5.19.0, this column was named `Required Number Of REF2 Research Outputs (rounded)`. The name was changed

in Elements 5.20.0 to more accurately reflect its function.

Required Number Of REF2 Research Outputs

The final number of required REF2 research outputs for the Unit, after taking reductions into account.

5.13.12 [Assessment Exercise Definition User]

For each Assessment Exercise Definition, lists Users who are assigned the "User" role in that definition. Also shows each User's Unit ID within each definition.

Column	Type	Example value
Assessment Exercise Definition ID	int	4
Unit ID	int	17
User ID	int	2947

Assessment Exercise Definition ID

References `[Assessment Exercise Definition].ID`.

Unit ID

ID of the Unit the user is assigned to. References `[Assessment Exercise Definition Unit].ID`.

User ID

User ID of the user who is assigned the role of a User of the Assessment Exercise Definition. References `[User].ID`.

5.13.13 [Assessment Item]

Each row represents an Assessment Item within a parent Assessment List. Essentially an item contains two pointers, either of which can be NULL. One is a pointer to a selected object, if the list definition requires objects to be selected for the list. If the list definition requires supporting information for its items, then the pointer to a supporting information object will be used.

Column	Type	Example value
ID	int	1
attachments hash	varchar(24)	7mS4Zpx2lGq8Gxwc4omfIu==
Definition ID	int	13
Exercise ID	int	16
Index	int	1
List Definition ID	int	13
List ID	int	13
Selected Object Category ID	int	1
reviews hash	varchar(24)	x2lj338Gxhs9mfIu7mS4Zf==
Selected Object ID	int	98958
Supporting Information ID	Int	(null)

ID

The database ID of the item.

attachments hash

A hash of this Item's data within the Assessment Item Attachment child table. This is used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection).

Used internally within the reporting synchroniser to track changes to attachments at exercise level.

Definition ID

The ID of the item definition.

Exercise ID

The ID of the exercise to which this item belongs. This ID can also be reached by dereferencing the parent exercise of the list to which this item belongs (via the List ID column).

Index

This Assessment Item's position within its parent Assessment List. Zero-based, i.e. the first item in the list has index 0.

List Definition ID

The ID of the parent list's definition (which determines the parent list's properties).

List ID

The ID of the parent list.

Selected Object Category ID

If the list requires objects to be selected, this is the ID of the selected object's category.

Selected Object ID

If the list requires objects to be selected, this is the ID of the selected object.

Supporting Information ID

If the item requires supporting information, the value of this column will be the ID of the supporting information object. Even though supporting information may be required, the value can be NULL if no supporting information has been supplied yet.

5.13.14 [Assessment Item Definition]

Each row details an item definition. Items belong to lists, so an item definition will belong to a list definition. There will always be exactly one item definition for each list definition because the properties of the item definition are the same for all of the many items on a list.

Column	Type	Example value
ID	int	13
Attachments Description Enabled	bit	0
Attachments Enabled	bit	0
Exercise Definition ID	int	7
List Definition ID	int	13
Reviewer Guidance Default Value	nvarchar(max)	Give a review on the NRO's suitability, and the supporting commentary.
Supporting Information Type ID	int	76

ID

The database ID of the particular item definition.

Attachments Description Enabled

Are attachment descriptions requested at time of upload?

Attachments Enabled

Are attachments configured to be allowed for each item on the list whose items this definition belongs to?

Exercise Definition ID

The parent assessment exercise definition this item definition belongs to.

List Definition ID

The assessment list definition whose items this definition belongs to.

Reviewer Guidance Default Value

The HTML guidance text to be displayed for items in this list to reviewers of exercises owned by researchers whose Unit does not override this guidance.

Supporting Information Type ID

If items of this definition selected on its corresponding list require supporting information, then the supporting information will be stored in an object of this type.

5.13.15 [Assessment List]

Each row defines an instance of a Assessment List within a parent Assessment Exercise. There can be as many lists within an exercise as there are Assessment List Definitions in the corresponding Assessment Exercise Definition.

Column	Type	Example value
Assessment Exercise ID	int	1
Property	nvarchar(100)	(null)
Index	int	0
ID	int	120
Definition ID	int	13
Exercise ID	int	16
Supporting Information ID	int	(null)

Assessment Exercise ID

The ID of the parent Assessment Exercise to which this list belongs.

Property

The list of which a particular assessment list (a row in this table) is a member.

Index

This Assessment List's position within its parent Assessment Exercise. Zero-based, i.e. the first list in the exercise has index 0.

ID

Unique database ID of this particular list.

Definition ID

The ID of the corresponding parent list definition, which determines the properties of this list.

Exercise ID

Redundant column. Deprecated. Do not use.

Supporting Information ID

The object ID of the supporting information object containing the supporting information for this list. Even if the list requires supporting information the value can be NULL if supporting information has not yet been supplied.

5.13.16 [Assessment List Definition]

Each row details a list definition. Lists belong to exercises, so a list definition will belong to an exercise definition. None or more list definitions may belong to each exercise definition. The properties of a list definition will determine the properties of individual lists that are created by users while building their assessment exercises.

Column	Type	Example value
ID	int	13
Abbreviated Name	nvarchar(15)	REF nominations
Attachments Description Enabled	bit	0
Attachments Enabled	bit	0
Can Hold Items	bit	1
Exercise Definition ID	int	7
Item Category ID	int	1
Maximum Eligible Date	date	2018-12-31
Maximum Items	int	6
Minimum Eligible Date	date	2014-01-01
Minimum Items	int	4
Name	nvarchar(100)	Research Outputs
Researcher Guidance Default Value	nvarchar(max)	Enter details for up to 15 Research Contributions, completing each of the requested pieces of information for each entry
Reviewer Guidance Default Value	nvarchar(max)	Review the content of the RC list as a whole.
Sort index	int	4
Supporting Information Type ID	int	(null)

ID

The database ID of the particular list definition.

Abbreviated Name

The abbreviated name given to the list and used throughout Elements to refer to the list within an exercise. E.g. a Research Outputs list could be abbreviated to RO. Cf. Name column.

Attachments Description Enabled

Are attachment descriptions requested at time of upload?

Attachments Enabled

Are attachments configured to be allowed for lists of this definition?

Can Hold Items

A flag that indicates whether or not an Assessment List can hold items. 0 (zero) for fields-only lists and no-item lists.

Exercise Definition ID

The parent assessment exercise definition this list belongs to.

Item Category ID

If the list is to be comprised of items that users need to select (e.g. selecting publications or grants for a list), then the category ID of the items that can be selected for the list is given here.

Maximum Eligible Date

When selecting objects for a list of this definition, the date of the object (e.g. the publication date of a publication, the award date of a grant) must be prior to this date for the object to be eligible for selection onto the list.

Maximum Items

What is the maximum number of items that is expected to be selected for a list of this list definition? Note that it is still possible to have more selected items than this maximum number. This number is not strictly enforced, but is used in Elements to guide the item selection process and can be used as part of exception reports to aid enforcement of the maximum value.

The value can be NULL, meaning there is no maximum number of selected items defined.

Minimum Eligible Date

When selecting objects for a list of this definition, the date of the object (e.g. the publication date of a publication, the award date of a grant) must be after this date for the object to be eligible for selection onto the list.

Minimum Items

What is the minimum number of items that is expected to be selected for a list of this list definition? Note that it is still possible have a list with fewer selected items than this minimum number. This number is not strictly enforced, but is used in Elements to guide the item selection process and can be used as part of exception reports to aid enforcement of the minimum value.

Name

The name given to the list and used throughout Elements to refer to the list within an exercise. E.g. Research Outputs. Cf. Abbreviated Name column.

Researcher Guidance Default Value

The HTML guidance text to be displayed for this list to researchers whose Unit does not override this guidance.

Reviewer Guidance Default Value

The HTML guidance text to be displayed for this list to reviewers of exercises owned by researchers whose Unit does not override this guidance.

Sort index

The list definitions can be reordered within their parent exercise definition. The value in this column should be ordered in ascending order.

Supporting Information Type ID

If this list also requires supporting information, then the supporting information will be stored in an object of this type.

5.13.17 [Assessment REF1 Researcher]

Details of REF1 Research staff.

Column	Type	Example value
User ID	int	4326
Date Of Birth	date	1982-07-13
Default REF1 Contribution Research Group ID	int	28
Exercise Definition ID	int	5
Include In Submission	bit	1
Initials	nvarchar(1)	D
Last Modified When	datetime	2020-04-22 17:36:23.519
Number Of Outputs Directly Input Into REF Submission System	int	1
ORCID iD	nvarchar(19)	0000-0001-9746-1193
Output Titles Directly Input Into REF Submission System	nvarchar(max)	Examining Implications of Brexit for the UK Research Base
REF1 Data Confirmation Workflow	nvarchar(20)	Entry in progress
REF6a Individual Circumstances	bit	0
Staff Category	nvarchar(1)	A
Submission Inclusion Notes	nvarchar(max)	
Surname	nvarchar(500)	Hook
Zero Attributions Expected	bit	0

User ID

The integer ID of the Elements User this row refers to. References `[User].ID`.

Date Of Birth

The REF1 Researcher's date of birth.

Default REF1 Contribution Research Group ID

The default REF2 Author Contribution Research Group for this REF1 Researcher. This is non-null if this REF1 Researcher has been assigned exactly 1 unique research group.

Exercise Definition ID

The integer ID of the Exercise Definition this row refers to. References `[Assessment Exercise Definition].ID`.

Include In Submission

Indicates whether or not the REF1 Researcher is included in the submission.

Initials

The first initial of the REF1 Researcher.

Last Modified When

When the REF1 record was last modified. If NULL, REF1 record data has not been updated from its default values.

Number Of Outputs Directly Input Into REF Submission System

Number of O-Confidential reports or S-Research datasets and databases attributed to this individual which will be (or have been) input directly into the REF submission system.

ORCID iD

The ORCID iD to be returned in the submission.

Output Titles Directly Input Into REF Submission System

Titles of O-Confidential reports or S-Research datasets and databases attributed to this individual being input directly into the REF submission system.

REF1 Data Confirmation Workflow

Data confirmation workflow state of the REF1 record. Possible values are:

- Entry in progress
- Checking underway
- Confirmed

REF6a Individual Circumstances

Whether the individual's minimum requirement of one attributed output has been waived due to REF6a individual circumstances.

Staff Category

Staff category of the REF1 researcher. Possible values are:

- A
- B

where A means "Current staff" and B means "Former staff".

Submission Inclusion Notes

Notes entered to accompany the 'Include in submission' bit field. For internal use only, not included in the final REF submission.

Surname

The surname of the REF1 Researcher.

Zero Attributions Expected

Indicates whether or not it is expected that the individual will have zero attributions and no REF6a waiver.

5.13.18 [Assessment REF1 Researcher Contract]

Contract details of REF1 Researchers.

N.B. the `datetime` columns in this table in fact represent dates and will always have a time

component of "00:00:00.000"

Column	Type	Example value
Assessment REF1 Researcher User ID	int	4512
Property	nvarchar(100)	
Index	int	0
ID	int	928
Contract End Date	date	(null)
Contract Start Date	date	(null)
Exercise Definition ID	int	(null)
Fixed Term Contract End Date	date	2022-04-01
Fixed Term Contract Start Date	date	2021-04-01
FTE	decimal(28,6)	0.6
FTE Notes	nvarchar(max)	
HESA ID	nvarchar(13)	0311411234569
Is Early Career Researcher	bit	0
Is On Fixed Term Contract	bit	1
Is On Secondment	bit	0
Is On Unpaid Leave	bit	0
Research Connection	nvarchar(max)	(null)
Secondment End Date	date	(null)
Secondment Start Date	date	(null)
Staff Category	nvarchar(1)	A
Unpaid Leave End Date	date	(null)
Unpaid Leave Start Date	date	(null)

Assessment REF1 Researcher User ID

The integer User ID of the REF1 Researcher this row refers to. References `[Assessment REF1 Researcher].[User ID]` (and therefore also references `[User].ID`).

Property

Standard child table column. Not used in this table; will always contain an empty string (i.e. `''`, not a NULL value).

Index

Standard child table column. The zero-based position of this row amongst all rows for the parent object.

ID

An integer ID for the row in this table.

Contract End Date

Category B contract end date.

Contract Start Date

Category B contract start date.

Exercise Definition ID

The integer ID of the Exercise Definition this row refers to. References `[Assessment Exercise Definition].ID`.

Fixed Term Contract End Date

If the REF1 Researcher is on a fixed term contract, the end date of that contract.

Fixed Term Contract Start Date

If the REF1 Researcher is on a fixed term contract, the start date of that contract.

FTE

Full Time Equivalent of the contract.

FTE Notes

Notes to accompany the `FTE` field.

HESA ID

Higher Education Statistics Agency ID of the REF1 Researcher.

Is Early Career Researcher

Whether or not the individual is considered to be an Early Career Researcher.

Is On Fixed Term Contract

Whether or not the individual is on a fixed term contract.

Is On Secondment

Whether or not the individual is on secondment.

Is On Unpaid Leave

Whether or not the individual is on unpaid leave.

Research Connection

Research connection statement. Required when FTE is between 0.20 and 0.29 inclusive.

Secondment End Date

If the REF1 Researcher is on secondment, the end date of that secondment.

Secondment Start Date

If the REF1 Researcher is on secondment, the start date of that secondment.

Staff Category

Staff category of the REF1 researcher. Possible values are:

- A
- B

where A means "Current staff" and B means "Former staff".

Unpaid Leave End Date

If the REF1 Researcher is on unpaid leave, the end date of that unpaid leave.

Unpaid Leave Start Date

If the REF1 Researcher is on unpaid leave, the start date of that unpaid leave.

5.13.19 [Assessment REF1 Researcher Contract No Research Connection Reason]

Where a REF1 Researcher's FTE value is between 0.2 and 0.29 inclusive and no Research Connection statement has been provided, a reason for the lack of a statement is required. This table reports on the reasons entered into the system.

Column	Type	Example value
Assessment REF1 Researcher Contract ID	int	396
Property	nvarchar(100)	
Index	int	0
Value	nvarchar(200)	Personal circumstances

Assessment REF1 Researcher Contract ID

The integer ID of the REF1 Researcher Contract this row refers to. References `[Assessment REF1 Researcher Contract]`.`ID`.

Property

Standard child table column. Not used in this table; will always contain an empty string (i.e. `''`, not a NULL value).

Index

Standard child table column. The zero-based position of this row amongst all rows for the parent object.

Value

The reason entered for the lack of a research connection statement.

Possible values in Elements 5.19.0 are:

- Caring responsibilities
- Personal circumstances
- Reduced hours
- Normal discipline practice

> **N.B.** after the release of Elements version 5.19.0, the REF2021 board changed the required names for these options. This change will be reflected in version 5.20.0. The new options are:
>
> - Caring responsibilities
> - Personal circumstances
> - Approaching retirement
> - Discipline practice

Any data entered into this field in 5.19.0 will be updated upon upgrade to use the new names.

5.13.20 [Assessment REF1 Researcher Contract Research Group]

Lists all assignments of Research Groups to REF1 Researcher contracts.

Column	Type	Example value
Assessment REF1 Researcher Contract ID	int	582
Property	nvarchar(100)	
Index	int	0
Assessment REF Research Group ID	int	17

Assessment REF1 Researcher Contract ID

The integer ID of the REF1 Researcher Contract this row refers to. References `[Assessment REF1 Researcher Contract].ID`.

Property

Standard child table column. Not used in this table; will always contain an empty string (i.e. `''`, not a NULL value).

Index

Standard child table column. The zero-based position of this row amongst all rows for the parent object.

Assessment REF Research Group ID

The integer ID of the REF Research Group this row refers to. References `[Assessment Exercise Definition Unit REF Research Group].ID`.

5.13.21 [Assessment REF2 Output]

Contains data about the decisions made by reviewers of publications submitted for REF Assessment Exercises (i.e. those with "Is REF submission" checked in their Assessment Exercise Definition). Publications will only be listed once a decision has been made; publications awaiting review or that have been de-selected by a reviewer will not be listed.

Note that when a REF Unit of Assessment is deleted, data about its associated REF2 Outputs will remain in this table (and its child tables) until a full Reporting Database synchronisation is triggered, at which point they will be deleted.

Column	Type	Example value
ID	int	314
Acceptance Notes	nvarchar(max)	
Additional Coauthors Override	int	2
Additional Information	nvarchar(max)	
Additional Information Word Count	int	76
Assessment Exercise Definition ID	int	13
Attribution Count	int	1
Calculated Additional Coauthors Count	int	5
Calculated REF2 Output Type ID	nvarchar(1)	B
Confirmation Status	nvarchar(20)	Entry in progress
Contribution to Each Attributed REF1s Attribution Count	int	1
Created When	datetime	2020-05-12 12:32:08.480
Cross-referral	nvarchar(4)	B-07
Double-weighted	bit	1
Double-weighting Reserve Output ID	int	481

Double-weighting Reserve Publication ID	int	50837
Double-weighting Statement	nvarchar(max)	
Double-weighting Statement Word Count	int	34
English Abstract	nvarchar(max)	This paper analyses interdisciplinary literature to inform anti-corruption research and practice by producing a framework to facilitate critical analysis of bribery.
English Abstract Word Count	int	21
Factual Information About Significance Of The Output	bit	1
Includes Significant Material Published Prior To 2014	bit	0
Inferred Additional Coauthors Count	int	5
Information About Research Process Or Content	bit	0
Is Attributable	bit	1
Is Criminology	bit	1
Is English Language Output	bit	1
Is Forensic	bit	1
Is Interdisciplinary	bit	1
Is Pending	bit	0
Is Reserve	bit	0
Is Sensitive	bit	1
Language Within Unit Remit	bit	1
Media Of Output	nvarchar(max)	(null)
Modified When	datetime	2020-04-02
Output Allocation 1	nvarchar(128)	
Output Allocation 2	nvarchar(128)	
Output Allocation 3	nvarchar(128)	
Output Format Default Value	nvarchar(10)	Electronic
Output Format Override	nvarchar(10)	
Output Subprofile Category	nvarchar(max)	Dentistry
Output Type Override	nvarchar(1)	D
Overall Predicted Score ID	int	12
Overall Predicted Score Notes	nvarchar(max)	
Potential Final Attribution Count	int	1
Potential Final Contribution to an Affiliated REF1s Attribution Count	int	1
Pending Reserve Output ID	int	1427
Pending Reserve Publication ID	int	51234
Publication Date Override	date	2019-05-12
Publication Date Override Precision ID	int	1
Publication ID	int	52149
REF Mapped Article Number	nvarchar(max)	
REF Mapped DOI	nvarchar(300)	10.1080/10986065.2017.1295418
REF Mapped First Page	nvarchar(max)	95

REF Mapped ISBN	nvarchar(17)	
REF Mapped ISSN	nvarchar(9)	1098-6065
REF Mapped Issue	nvarchar(max)	2
REF Mapped Patent Number	nvarchar(max)	
REF Mapped Place	nvarchar(max)	
REF Mapped Publication Date	date	2019-05-01
REF Mapped Publication Date Precision ID	int	2
REF Mapped Publisher	nvarchar(max)	
REF Mapped Title	nvarchar(max)	Between Counting and Multiplication: Low-Attaining Students' Spatial Structuring, Enumeration and Errors in Concretely-Presented 3D Array Tasks
REF Mapped Url	nvarchar(500)	
REF Mapped Volume	nvarchar(max)	19
REF Mapped Volume Title	nvarchar(max)	Mathematical Thinking and Learning
REF OA Status Override	nvarchar(40)	Deposit exception
REF OA Status Override Notes	nvarchar(max)	
REF Output Submission Status ID	int	
Second Attribution User ID	int	4829
Status	nvarchar(15)	Accepted
Submission Status Notes	nvarchar(max)	
Supplementary Information	nvarchar(max)	
Unit ID	int	18

ID

An integer ID for the row in this table.

Acceptance Notes

Notes added by the reviewer to explain their decision.

Additional Coauthors Override

The overridden 'Number of additional co-authors' value (if any).

Additional Information

Statement of additional information to inform the assessment.

Additional Information Word Count

Word count of the `Additional Information` field

Assessment Exercise Definition ID

ID of the Assessment Exercise Definition. References `[Assessment Exercise Definition].ID`.

Attribution Count

The number of outputs this REF2 output should count for (e.g. double-weighted = 2) in the Unit.

Calculated Additional Coauthors Count

The number of additional coauthors. If the override value has been set, then this uses it. Otherwise, the count is inferred from the publication.

Calculated REF2 Output Type ID

The Output Type ID. If the override value has been set, then this uses it. Otherwise, the Output Type is inferred from the publication type and the default mapping for the Exercise Definition. References `[Assessment REF2 Output Type]`.ID .

Confirmation Status

Data confirmation workflow status of the Output. Possible values are:

- Entry in progress
- Checking underway
- Confirmed

Contribution to Each Attributed REF1s Attribution Count

The number of outputs this REF2 output should count for against each attributed REF1 researcher. Null if this output is not attributed.

Created When

The date and time that the REF2 Research Output was created in the REF exercise.

> **N.B.** This column was not included in early releases of Elements 5.20.0. It was added in the patch release 5.20.0.2685.

Cross-referral

Cross-referral Unit of Assessment.

Double-weighted

Whether the output is requested to be double-weighted.

Double-weighting Reserve Output ID

Output ID of the double-weighted reserve output. References `[Assessment REF2 Output]`.ID (i.e. the `ID` column of this table).

Double-weighting Reserve Publication ID

Publication ID of the double-weighted reserve output. References `[Publication]`.ID .

Double-weighting Statement

Double-weighting request statement.

Double-weighting Statement Word Count

The word count of the double-weighting statement

English Abstract

For outputs produced in a language other than english, a short English abstract.

English Abstract Word Count

The word count of the English Abstract. REF submission specifications require this to be one hundred words or less.

N.B. This column was not included in early releases of Elements 5.20.0. It was added in the patch release 5.20.0.2724 following a clarification of the REF guidance.

Factual Information About Significance Of The Output

Indicates whether the 'Additional information' field includes factual information about the significance of the output.

Includes Significant Material Published Prior To 2014

Indicates whether the output includes significant material published prior to 2014 and this is described in the 'Additional information' field.

Inferred Additional Coauthors Count

The number of additional coauthors inferred from the publication.

Information About Research Process Or Content

Indicates whether the 'Additional information' field includes information about the research process or content.

Is Attributable

Whether the REF2 Output is attributable. The output is not attributable if none of the output's affiliations are attributable.

Is Criminology

When 1, indicates that this output embodies research in criminology.

Is English Language Output

Whether the REF2 Output is produced in the English language.

Is Forensic

When 1, indicates that this output embodies research in forensic science.

Is Interdisciplinary

When 1, indicates that this output is interdisciplinary research.

Is Pending

When 1, indicates that this is a pending output (i.e. due for publication between the submission deadline and 31 Dec 2020).

Is Reserve

Is a double-weighting or pending reserve output.

Is Sensitive

Output contains sensitive information and should be excluded from the published submission.

Language Within Unit Remit

> **N.B.** This column was not included in early releases of Elements 5.20.0. It was added in the patch release 5.20.0.2685 following a clarification of the REF guidance.

When 1, indicates that the output has been produced in a language within the remit of the Unit, or that the Unit has indicated that they are able to assess outputs in this language.

Media Of Output

Describes the form of the output being submitted, where it has not been possible to submit the final version of the output in electronic form.

Modified When

A datestamp indicating the last time this entry was updated.

Output Allocation 1, Output Allocation 2, Output Allocation 3

Specific Units only. These three columns contain the output allocations, if any.

Output Format Default Value

Output format default value.

Output Format Override

Output format override value.

Output Type Override

Overridden REF2 output type ID/character

Output Subprofile Category

Units of Assessment 3 and 12 only. The sub-profile category of the output.

For REF Unit 3 (A-03, Allied Health Professions, Dentistry, Nursing and Pharmacy), possible values are:

- Nursing
- Dentistry
- Pharmacy
- Allied Health Professions
- Biomedical Sciences

For REF Unit 12 (B-12, Engineering), possible values are:

- Aeronautical
- Mechanical and Manufacturing Engineering
- Bio-engineering
- Civil and Construction Engineering,
- Chemical Engineering
- Electrical and Electronic Engineering
- General Engineering
- Metallurgy and Materials

This value will be NULL for all other Units of Assessment.

Overall Predicted Score ID

ID of the overall predicted score assigned.

Overall Predicted Score Notes

Notes to accompany the 'Overall predicated score' field.

Potential Final Attribution Count

The number of outputs this REF2 output should count for (e.g. double-weighted = 2) in the Unit. If this output is not attributed, this states the value for when the output is attributed to a single REF1 Researcher.

Potential Final Contribution to an Affiliated REF1s Attribution Count

The number of outputs this REF2 output should count for against each attributed REF1 researcher. If this output is not attributed, this states the value for when the output is attributed to a single REF1 Researcher.

Pending Reserve Output ID

Output ID of the pending reserve output. References `[Assessment REF2 Output].ID` (i.e. the `ID` column of this table).

Pending Reserve Publication ID

Publication ID of the pending reserve output. References `[Publication].ID`.

Publication Date Override

Overridden Publication date.

Publication Date Override Precision ID

Precision of the overridden publication date. `[Date Precision].ID`.

Publication ID

The integer ID of the submitted publication.

REF Mapped Article Number

Article number (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped DOI

DOI (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped First Page

First page (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped ISBN

ISBN (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped ISSN

ISSN (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Issue

Issue (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Patent Number

Patent number (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Place

Place (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Publication Date

Publication date. Uses the override (if set) or infers the value from the associated Publication. Non-null only if it should be provided for the XML generation.

REF Mapped Publication Date Precision ID

Indicates the precision to which the Publication date is known. References `[Date Precision].ID`.

REF Mapped Publisher

Publisher (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Title

Title (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Url

URL (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Volume

Volume (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Mapped Volume Title

Volume Title (sourced from the associated Publication). Non-null only if it should be provided for the XML generation.

REF Output Submission Status ID

ID of Output Submission Status

REF OA Status Override

Overridden 'REF OA status' value.

REF OA Status Override Notes

Notes to accompany the 'REF OA Status Override' field.

Second Attribution User ID

User ID of the second attributed REF1 Researcher. References `[User].ID`.

Status

The decision made by the reviewer. Possible values are:

- Accepted
- Not Accepted

Submission Status Notes

Notes to accompany the `Output Submission Status` field.

Supplementary Information

DOI or URL for any supplementary information published alongside the output.

Unit ID

The integer ID of the Unit of Assessment.

5.13.22 [Assessment REF2 Output Affiliated REF1 User]

Applicable to UK institutions submitting to the REF 2021 assessment. Child table of [Assessment REF2 Output]. Lists the affiliations of REF 1 Users to REF 2 Outputs.

Column	Type	Example value
Assessment REF2 Output ID	int	4817
User ID	int	2746

Assessment REF2 Output ID

The integer ID of the Assessment REF2 Output. References `[Assessment REF2 Output].ID`.

User ID

The integer ID of the affiliated (REF 1) User. References `[User].ID`.

5.13.23 [Assessment REF2 Output REF1 Contribution]

Child table of [Assessment REF2 Output]. Each row describes a REF1 Researcher's contribution to the REF2 Output.

Column	Type	Example value
Assessment REF2 Output ID	int	392
Property	nvarchar(100)	
Index	int	0
Contribution Statement	nvarchar(max)	Co-author.
Contribution Statement Word Count	int	2
Is Attributable	bit	0
Is Lead Author	bit	1
Research Group ID	int	17
User ID	int	2746

Assessment REF2 Output ID

The integer ID of the Assessment REF2 Output. References `[Assessment REF2 Output].ID`.

Property

Standard child table column. Not used in this table; will always contain an empty string (i.e. `''`, not a NULL value).

Index

Standard child table column. The zero-based position of this row amongst all rows for the parent object.

Contribution Statement

REF2 Author contribution statement.

Contribution Statement Word Count

Word count of the contribution statement.

Is Attributable

Whether it is appropriate to attribute this REF2 to the named REF1 Researcher

Is Lead Author

Whether the named REF1 Researcher is the lead / corresponding author

Research Group ID

ID of the Research Group assigned to the Staff Output link. References `[Assessment Exercise Definition Unit REF Research Group].ID`

User ID

User ID of the named REF1 Researcher. References `[User].ID`.

5.13.24 [Assessment REF2 Output Type]

Lists the allowed REF20201 output types for REF2 Research outputs, as defined in Annex K of Guidance on submissions (REF 2019/01).

Column	Type	Example value
ID	nvarchar(1)	B
Name	nvarchar(40)	Edited book

ID

The single-character ID of REF2 output type.

Name

The name of REF2 output type.

5.13.25 [Category]

The [Category] table contains one row for each category of object in the Symplectic Elements database. Each row contains the different names and headings for the category, providing the internal, default and display names for each. For default and display names, sentence case, lower case, singular and plural alternatives are provided.

N.B. In this documentation, the text "{Category}" (with curly braces) is a placeholder which can be substituted with any value from the `Heading Singular` column.

Column	Type	Example value
ID	int	1
Allow User Privacy Control	bit	1
Allow User Privacy Control Modified When	datetime	
Default Privacy Level	nvarchar(10)	
Default Privacy Level Modified When	datetime	
Heading Lowercase Plural	nvarchar(100)	publications
Heading Lowercase Singular	nvarchar(100)	publication
Heading Plural	nvarchar(100)	Publications
Heading Singular	nvarchar(100)	Publication
Name	varchar(50)	publication
Object Display Name Lowercase Plural	nvarchar(100)	research outputs
Object Display Name Lowercase Singular	nvarchar(100)	research output
Object Display Name Sentence Case Plural	nvarchar(100)	Research outputs
Object Display Name Sentence Case Singular	nvarchar(100)	Research output
Reporting Table Name	nvarchar(100)	Publication
RoleAccess	int	3

ID

The internal integer ID of the category.

Allow User Privacy Control

Whether owning users should be offered control over privacy levels for objects of this category.

Allow User Privacy Control Modified When

When [Allow User Privacy Control] was last modified. Null if it has never been modified.

Default Privacy Level

Display name for the default level of objects of this category.

Default Privacy Level Modified When

When [Default Privacy Level] was last modified. Null if it has never been modified.

Heading Lowercase Plural

The lower case plural form of the default name for the category.

Heading Lowercase Singular

The lower case singular form of the default name for the category.

Heading Plural

The sentence case plural form of the default name for the category.

Heading Singular

The sentence case singular form of the default name for the category.

Name

The system's internal name for the category. Used, for example, to identify the category in API calls and responses.

Object Display Name Lowercase Plural

The lower case plural form of the display name for the category.

Object Display Name Lowercase Singular

The lower case singular form of the display name for the category.

Object Display Name Sentence Case Plural

The sentence case plural form of the display name for the category.

Object Display Name Sentence Case Singular

The sentence case singular form of the display name for the category.

Reporting Table Name

The name used for the category in the table and column names of this database. Not dynamic, i.e. changing a category's display name will *not* affect table and column names in the database.

RoleAccess

Internal use only. Do not include this value in any result sets.

5.13.26 [Claimed User Identifier]

This view on the [User Identifier] table lists only identifiers that have been positively claimed for users, i.e. to auto claim or auto suggest objects for the user. It excludes the columns of [User Identifier] that are not relevant to claimed identifiers.

Column	Type	Example value
User ID	int	666
Identifier Scheme ID	int	9
Identifier Value	nvarchar(200)	0000-0001-8276-0254
Is Connection Configured	bit	1
Is Connection Known To Be Broken	bit	1
Should Auto-claim	int	1
Should Auto-suggest	int	0
Status Modified When	datetime	2019-07-09 09:37:05.487
Status Set By Agent ID	int	3018
Status Set By Agent Type ID	int	4

Status Set By User ID	int	3018

For descriptions of each column, see the documentation for the [User Identifier] table.

5.13.27 [Collaboration Type]

The Collaboration Type table contains the different collaboration type(s) defined in Elements.

Column	Type	Example value
ID	int	1
Name	nvarchar(100)	International collaboration

ID

An integer ID for the collaboration type.

Name

A descriptive name for the type of collaboration.

5.13.28 [Currency]

The Currency table contains the different currencies used in Elements. These primarily exist for formatting purposes, as currency amounts that appear in the reporting database are associated with their currency types.

Column	Type	Example value
Currency Code	nvarchar(3)	CAD
Localised Currency Symbol	nvarchar(3)	C$
Long Currency Symbol	nvarchar(3)	C$
Short Currency Symbol	nvarchar(1)	$

Currency Code

This is the three-character ISO currency code, and is the identifier by which currencies are referenced from elsewhere in the reporting database.

Localised Currency Symbol, Long Currency Symbol, Short Currency Symbol

These provide several ways of representing the currency in text.

5.13.29 [Data Source]

Lists all data sources, across all categories. For a subset of this data that is relevant to a single category, you may also use the appropriate [{Category} Source] view of this table.

Column	Type	Example value
Category ID	int	1
ID	int	10
Description	nvarchar(250)	(null)
Holds Citation Counts	bit	0
Is API Importable	bit	1
Name	nvarchar(100)	Dimensions
Name Identifier	nvarchar(100)	dimensions
Reporting Precedence	int	4

RoleAccess	int	3

Category ID

The integer ID of the category to which records harvested from this data source belong. References `[Category].ID`.

ID

The integer ID of the data source. Unique within a category, i.e. `ID` and `Category ID` together form the primary key of this table.

Description

A description of the data source which may be entered via the data source management page for certain data sources, such as repositories connected via RT2.

Holds Citation Counts

Whether the source holds citation counts.

Is Active

Whether the data source is active.

Is API Importable

Whether records can be imported to the data source via the Elements API. Typically set to 1 for custom sources (e.g. local feeds for publication and grant). Zero for other sources, where an external system is the metadata authority and so import via the API would not be appropriate.

Name

The display name of the data source. This name is editable for several sources, so may differ between Elements instances. The `Data Source` columns in the various 5.9.1 [{Category}] and 5.9.4 [{Category} Record] tables reference the values in this column.

When referencing this column, be aware that data source names may appear in multiple categories. Such cases may vary between systems; in a default Elements system they are:

- *Manual* (all categories except Funding Bodies)
- *Local Source 1* (Publications, Professional activities, Organisational structures, Projects, Pieces of equipment, Teaching activities)
- *Dimensions for Universities* (Publications, Grants)
- *PubMed* (Publications, Funding Bodies)

Referencing the `Name` column only may therefore return false matches. To avoid this, you should either (a) use the appropriate 5.8.3 [{Category} Source] table, as in this example which compares the Reporting precedence order for Publications with a count of user record preferences for each source:

```
-- Count of User Publication Preferences by Data Source, listed in
Reporting
-- Tools precedence order.
SELECT  ps.[Name] "Data Source"
        ,ps.[Reporting Precedence]
        ,COUNT(upp.[Preferred Record ID]) "User Preference count"
FROM    [User Publication Preferences] upp
        JOIN [Publication Record] pr
            ON  pr.ID = upp.[Preferred Record ID]
        RIGHT JOIN [Publication Source] ps
            ON  ps.[Name] = pr.[Data Source]
GROUP BY ps.[Name]
        ,ps.[Reporting Precedence]
ORDER BY ps.[Reporting Precedence] DESC
;
```

or (b) use the `ID` , `Category ID` primary key pair:

```
-- For Publication and Grant data sources, reports on how many users
are using
-- source-specific overrides for the various search terms.
SELECT  c.ID "Category ID"
        ,c.[Heading Singular] "Category"
        ,ds.[Name] "Data Source"
        ,ds.[Reporting Precedence]
        -- this COUNT( NULLIF() ) construction counts only true bit
values
        ,COUNT( NULLIF(usto.[Override Affiliation], 0) ) "Affiliation
Override Count"
        ,COUNT( NULLIF(usto.[Override Author]     , 0) ) "Name
Override Count"
        ,COUNT( NULLIF(usto.[Override Journal]    , 0) ) "Journal
Override Count"
        ,COUNT( NULLIF(usto.[Override Keyword]    , 0) ) "Keyword
Override Count"
        ,COUNT( NULLIF(usto.[Override Start Date] , 0) ) "Start Date
Override Count"
FROM    [Data Source] ds
        JOIN [Category] c
            ON  c.ID = ds.[Category ID]
        LEFT JOIN [User Search Term Overrides] usto
            ON  ds.[Category ID] = usto.[Category ID]
                AND ds.ID = usto.[Source ID]
WHERE   c.[Name] IN ('publication', 'grant')
GROUP BY c.ID
        ,c.[Heading Singular]
        ,ds.[Name]
        ,ds.[Reporting Precedence]
ORDER BY c.ID
        ,ds.[Reporting Precedence] DESC
;
```

Name Identifier

The internal identifier used by Elements to refer to the data source. Not editable, therefore consistent across Elements instances.

Reporting Precedence

The data source's position in the Reporting Tools precedence list for its category. The ordering of this list is set within Elements, on the Data Source Management page.

Note that after editing a reporting precedence list, you should perform a full reload of the reporting

database so that the changes are correctly reflected in the database. See 4.5 Reloads and Rebuilds for details of the full reload operation.

RoleAccess

Internal use only. Do not include this value in any result sets.

5.13.30 [Date]

The Date table contains all dates between 1900-01-01 and 2049-12-31 in various formats, for convenience.

Column	Type	Example value
Date	date	1927-05-19
Calendar Year	smallint	1927
Day Number of Month	smallint	19
Full Date Name	nvarchar(15)	19 May 1927
Month And Year ID	int	192705
Month and Year Name	nvarchar(15)	May 1927
Month Name	nvarchar(10)	May
Month Number of Year	tinyint	5

Each row contains one date, with each of its parts in several formats.

> Up to and including Elements 5.19.0, the primary key of this table was an `int` column called `ID`. In Elements 5.20.0 this was changed to a `date` column called `Date`. This was due to a database-wide change from representing dates as integers (e.g. `20140620`) to dates (e.g. `'2014-06-20'`).

5.13.31 [Date Precision]

The Date Precision table is a reference table, which contains a description for different levels of date precision used in the reporting database.

Column	Type	Example value
ID	int	1
Name	nvarchar(20)	Month

ID

A unique identifier for the date precision.

Name

A short description of the precision, for example "Day", "Month" or "Year".

5.13.32 [Declined User Identifier]

This view on the [User Identifier] table lists only identifiers that have been declined for users, i.e. to auto reject objects for the user or to be ignored in the automatic process for that user. It excludes the columns of [User Identifier] that are not relevant to declined identifiers.

Column	Type	Example value
User ID	int	4353
Identifier Scheme ID	int	8
Identifier Value	nvarchar(200)	C-4764-2008

Should Auto-reject	int	1
Should Ignore	int	0
Status Modified When	datetime	2019-07-09 09:37:05.487
Status Set By Agent ID	int	3018
Status Set By Agent Type ID	int	4
Status Set By User ID	int	3018

For descriptions of each column, see the documentation for the [User Identifier] table.

5.13.33 [Delegate]

Symplectic Elements has the concept of a delegate. Each user can nominate a number of delegates who are allowed to impersonate the user when logged in to the system.

This table lists all delegate nominations in the system.

Column	Type	Example value
User ID	int	1
Delegate ID	int	2

User ID

The ID of the user who has nominated the delegate to be able to act on the user's behalf.

Delegate ID

The ID of the user who has been nominated to act as a delegate.

5.13.34 [Email Address Type]

This table lists the email address types that are defined within Symplectic Elements for use on a user's Profile.

Column	Type	Example value
Type ID	int	1
Type Name	nvarchar(20)	Personal

5.13.35 [Email Sent Log]

This table records emails passed from the Elements application to the mail service for processing. Inclusion in this table does **not** guarantee that an email was successfully sent or received. Log entries are deleted after the time limit set on Elements' Log Truncation page (the default is 182 days).

Column	Type	Example value
ID	int	432
Email Type	nvarchar(50)	Deposit Reminder
Time Sent	datetime	2017-10-23 13:24:17.537
User ID	int	256

ID

A sequential integer identifier for each row in the table.

Email Type

The type of email sent. Possible values are "Notification", "Notification Reminder", "Deposit Reminder", "Mailgroup" and "Error"

Time Sent

Date and time the email was passed to the mail service (actual sending time may be later).

User ID

The User ID of the email's recipient. Only the user in the email's 'To:' field is included; recipients in the 'Cc:' field (e.g. delegates) are not recorded.

5.13.36 [Embargo Status]

The Embargo Status table contains the different possible embargo statuses that a publication can have.

The Publication table will contain an Embargo Status ID column that points to this table. There are five different embargo statuses that we use: "Embargo not specified", "Embargo unknown: unknown publication date", "No embargo", "Indefinite embargo" and "Embargoed". The Embargo Date column in the Publication table will hold a non-NULL value only when Embargo Status ID = 5, i.e. for the "Embargoed" status. This date may be in the future as well as in the past.

To understand whether a publication is under embargo or not, we suggest using the combination of the Embargo Status ID and Embargo Date with the following understanding:

1. If the Embargo Status is "Embargo not specified" or "Embargo unknown: unknown publication date", there is not enough information supplied to understand whether the publication embargoed;
2. If the Embargo Status is "No embargo", or if it is "Embargoed" and the Embargo Date is in the past, the publication is not currently under embargo;
3. If the Embargo Status is "Indefinite embargo", or if it is "Embargoed" and the Embargo Date is in the future, the publication is currently under embargo.

Column	Type	Example value
ID	int	1
Name	nvarchar(50)	Embargo not specified: unknown publication date

ID

The unique identifier for the embargo status.

Name

A natural language description of the embargo status.

5.13.37 [Embeddable Media Type]

The Embeddable Media Type table lists the different types of media supported by Elements for embedding in public profiles.

Column	Type	Example value
Type ID	int	1
Type Name	nvarchar(20)	YouTube

Type ID

The integer ID of the embeddable media type. Referenced by [User Record Embeddable Media].[Type ID].

Type Name

The name of the embeddable media type.

5.13.38 [Geography]

This table contains a country name lookup based on ISO country code. It can be used in conjunction with Country cross-tables to enrich reporting.

Column	Type	Example value
Country Code	nvarchar(2)	VC
Continent Code	nvarchar(2)	NA
Continent Name	nvarchar(20)	North America
Country Name - English	nvarchar(100)	SAINT VINCENT AND THE GRENADINES
Is Home Country	bit	0

Country Code

ISO standard two-character country code.

Continent Code

ISO standard two-character continent code.

Continent Name

The name of the continent.

County Name - English

An English-language name for the country.

Is Home Country

Whether or not the country is the one that the institution belongs to.

5.13.39 [Global Settings]

This table contains various system-wide settings values in a single row.

Column	Type	Example value
ID	Int	1
Data Rights Assertion	nvarchar(max)	This data is the property of the Organisation, and can only be used with permission.
Is User Photo Upload Allowed	bit	1
Organisation Name	nvarchar(400)	Lilliput University
Organisation Name Short	nvarchar(400)	LU
Product Name	nvarchar(400)	Symplectic Elements
Product Name Short	nvarchar(400)	Elements
Website Base URL	nvarchar(500)	https://lilliput.symplectic.co.uk/elements/

Data Rights Assertion

The assertion of rights included with all API responses configured by the system administrator.

Is User Photo Upload Allowed

Whether users are able to upload photos.

Organisation Name & Organisation Name Short

Names for your institution.

Product Name & Product Name Short

Names for this system at your institution.

Website Base URL

The location of the main Elements web application.

5.13.40 [Group]

The Symplectic Elements system allows your institution to organise users into administrative groups. These aid with the running and administration of the Symplectic Elements system itself, and are not to be confused with the Organisational Structures managed as a part of the overall collection of research data in the system.

The set of groups in the system often closely resembles your institution's administrative hierarchy, reflecting departments, faculties and research groups as well as custom collections of academics useful to various research information exercises.

Users can belong to more than one group.

There is always an overarching group with ID 1 that sits at the top of the group structure. The "Parent Group ID" column describes the group structure and how groups are embedded within other groups.

Column	Type	Example value
ID	int	1
Depth	int	1
Description	nvarchar(500)	The whole institution
Level 2 Group ID	int	(null)
Level 2 Group Name	nvarchar(100)	(null)
Level 3 Group ID	int	(null)
Level 3 Group Name	nvarchar(100)	(null)
Modified When	datetime	2016-03-22 17:44:45.933
Name	nvarchar(100)	Institution
OA Policy ID	Int	41
OA Policy Inherited	bit	0
Parent Group ID	int	(null)
Primary Group Descriptor	nvarchar(100)	(null)
Type	nvarchar(100)	Organisation

ID

The unique ID of the group.

Depth

How depth within the structure of sub-groups which this group sits at. The organisational group has a depth of 1; a direct sub-group has a depth of 2, and so on.

Description

A description of the group.

Level 2 Group ID

If this group has depth 2 or higher, then the unique ID of the parent group at depth 2, otherwise NULL.

Level 2 Group Name

If this group has depth 2 or higher, then the name of the parent group at depth 2, otherwise NULL.

Level 3 Group ID

If this group has depth 3 or higher, then the unique ID of the parent group at depth 3, otherwise NULL.

Level 3 Group Name

If this group has depth 3 or higher, then the name of the parent group at depth 3, otherwise NULL.

Modified When

A datestamp indicating the last time this entry was updated.

Name

The name of the group.

OA Policy ID

The integer ID number of the OA Policy. References `[OA Policy].ID`.

OA Policy Inherited

This field denotes whether or not the OA Policy's settings are inherited from a parent policy.

Parent Group ID

The set of groups in the system are organised in a hierarchy.

There is always an overarching group with ID 1 that sits at the top of the group structure. The group structure and how groups are embedded within other groups is described by this column, which reference the parent group of this group by its ID.

Primary Group Descriptor

If the group is of the "primary group" type, a persistent and unique identifying value for the group needs to be supplied by your institution. The primary group descriptor is this value, and is used in various places to help assign each user to a primary group.

Each user is assigned one primary group, which determines via its settings much of the behaviour seen by the user when interacting with the Symplectic Elements system.

Type

There are four different types of group: Organisation (reserved for the single top level group containing everyone), Primary, Auto and Manual. If interested, see your system administrator for more details of what these types of group represent and how they are used.

5.13.41 [Group User Membership]

This table details which users belong to which groups. Users who indirectly belong to the group (via membership of an embedded group) are included.

Column	Type	Example value
Group ID	int	1
User ID	int	5
Is Explicit	bit	1
Is Primary	bit	1

Group ID

The group to which the user belongs.

User ID

The user who is in the group.

Is Explicit

The user is either a direct member of the group, in which case they are an explicit member, or they belong to the group due to their membership of a sub-group, in which case they are not an explicit member.

Is Primary

Indicates whether the membership is created via the user's Primary Group Descriptor.

N.B. a User may be an member of more than one Primary Group. For example, they may have explicit membership of Primary Group A via their Primary Group Descriptor, and implicit membership of Primary Group B via membership of an Auto or Manual Group that is a child of Primary Group B. Only the explicit membership of Group A is considered a 'primary' membership.

Furthermore, in the case that a User's Primary Group Descriptor does not match any Primary Group's Primary Group Descriptor, the User's primary membership will be of the top-level Organisation group.

The `Is Primary` column provides a convenient way of filtering explicit memberships that are created via a Primary Group Descriptor. For example:

```sql
SELECT  *
FROM    [Group User Membership]
WHERE   [Is Primary] = 1
```

is equivalent to:

```sql
SELECT  gum.*
FROM    [Group User Membership] gum
        JOIN [Group] g ON g.ID = gum.[Group ID]
WHERE   gum.[Is Explicit] = 1
        AND (
            g.[Type] = 'Primary'
            OR g.[Type] = 'Organisation'
        )
```

Note that due to the language used here, the phrase "Primary Group Membership" can mean either "Membership of a Primary Group" or "Primary Membership of a Group".

5.13.42 [Group User Role]

The Symplectic Elements system uses a flexible rights model that allows your system administrators to assign various rights to users.

Some of these rights are modelled by assigning a user to a role on a group. This table lists the roles assigned to the users in the system.

Column	Type	Example value
Group ID	int	1
Role	nvarchar(50)	Administrator
User ID	int	5

Group ID

The group on which the user is assigned the role.

Role

The role assigned to the user. Example roles include Administrator, Statistician and Research Manager. See your system administrator for more information on the various roles that can be assigned to the users.

User ID

The user to whom the role has been assigned.

5.13.43 [HERDC Category]

This table lists HERDC research categories belonging to HERDC returns.

Column	Type	Example value
ID	int	1
Display Name	nvarchar(400)	Book
Guidance Text	nvarchar(max)	To be included in this category...
Guidance Text (cropped)	nvarchar(400)	To be included in this category...
Return Year	int	2013
Type	int	1

ID

HERDC category's unique identifier.

Display Name

Category name.

Guidance Text/ Guidance Text (cropped)

Text explaining criteria for determining publications eligible to be included in the return for the category.

Return Year

The year of a HERDC return the category belongs to.

Type

Category type, determining points-calculation algorithm. Currently defined types are:

- Book
- Chapter
- Conference
- Journal
- Other

5.13.44 [HERDC Category Object Type]

Elements publication types that can get included in a return have to be mapped to HERDC research categories. Several publication types can be mapped to one HERDC category. This table defines these mappings.

Column	Type	Example value
HERDC Category ID	int	49
Publication Type ID	int	2
Publication Type	nvarchar(200)	Book
Property	nvarchar(100)	
Index	int	0

HERDC Category ID

HERDC category's unique identifier.

Publication Type ID

Integer ID of the Elements Publication Type.

Publication Type

The name of the Elements Publication Type.

Property

The property list to which a particular table row belongs. See 5.12 Child tables for more information.

Index

This Object Type's position within the list of mappings to its parent HERDC Category. Zero-based, i.e. the first type in the list has index 0.

5.13.45 [HERDC Group]

Each HERDC return defines its own group hierarchy. When creating a return, administrators can choose to copy current Elements group structure or clone group structure from a previous return. Manual modifications to HERDC group structure are also possible.

Column	Type	Example value
ID	Int	1057
Description	nvarchar(2000)	Organisation level group
Name	nvarchar(400)	University of Lilliput
Return Year	Int	2013

ID

A unique group identifier.

Description

Group's description text.

Name

Group name.

Return Year

The year of a HERDC return the group belongs to.

5.13.46 [HERDC Group Descriptor]

Each HERDC group can have one or more group descriptors assigned to it. Descriptors are values coming through the HR feed, identifying users as belonging to a certain HERDC group within a return.

Column	Type	Example value
ID	int	49
Property	nvarchar(100)	
Index	int	0
Group ID	int	1057
Name	nvarchar(200)	1112460464

ID

Descriptor's unique identifier.

Property

The property list to which this Descriptor belongs. See 5.12 Child tables for more information.

Index

This Descriptor's position within the list of descriptors assigned to its parent Group. Zero-based, i.e. the first Descriptor in the list has index 0.

Group ID

HERDC group's unique identifier.

Name

Descriptor field text.

5.13.47 [HERDC Group Group Membership]

HERDC groups are organised in a hierarchy where a group has one parent and can have one or more child groups.

Column	Type	Example value
Child Group ID	int	1064
Parent Group ID	int	1057

Child Group ID

References the child group by its ID.

Parent Group ID

References the parent group by its ID.

5.13.48 [HERDC Group User Membership]

This table details which users belong to which HERDC groups. Users who indirectly belong to the group (via membership of an embedded group) are included.

Column	Type	Example value
Group ID	int	1057
User ID	int	3

Group ID

The group to which the user belongs.

User ID

The user who is in the group.

5.13.49 [HERDC Nomination]

A nomination represents a publication that has been nominated for inclusion in a HERDC return. It stores data about nomination status, details as well as important publication fields that need to be preserved if a publication is deleted after a return has been finalised. Publications that have not been nominated will not have an entry in this table.

Column	Type	Example value
ID	int	1064
Conference Name	nvarchar(max)	Sydney South Asia Seminar
Conference Place	nvarchar(max)	Sydney, New South Wales
Contact User ID	Int	5
Doi	nvarchar(max)	10.3758/s13428-012-0232-y
Editor	nvarchar(max)	John, S
End Date	nvarchar(max)	2012-04-15
evidence hash	varchar(24)	zBnOIDj1KMWujasFqpn9vA==
HERDC Category	nvarchar(max)	Journal article
Initial HERDC Category	nvarchar(max)	Journal article
Is Accepted	bit	1
Is Assessed	bit	1
Is Awaiting Assessment	bit	0
Is Declined	bit	0
Is Finalised	bit	1
Is Nominated	bit	1
Label	nvarchar(200)	A1
Modified When	datetime	2013-05-07 13:44:49.177
Pagination	nvarchar(max)	56
Parent Title	nvarchar(max)	MIMS Disease Index
Place Of Publication	nvarchar(max)	New York, NY, USA
Publication ID	int	6973
Publication Record ID	int	1763
Publisher	nvarchar(max)	Oxford University Press
Return ID	int	39
Return Year	int	2010
Serial Number	nvarchar(max)	0443065640
Start Date	nvarchar(max)	2012-03-15
Status	nvarchar(100)	accepted

Title	nvarchar(max)	Task-Switching in schizophrenia
Total Authors	int	3
Total Chapters	int	15
Volume	nvarchar(max)	49

ID

Unique nomination identifier.

Conference Name

For Conference publications, a conference name.

Conference Place

For Conference publications, a conference place.

Contact User ID

User ID of an author designated as a primary contact.

Doi

Publication's DOI.

Editor

Publication editor.

evidence hash

A hash of this nomination's data within the HERDC Nomination Evidence File child table. This is used by Elements for change detection during Reporting Database synchronisation (downstream systems may cache this and also use it for change detection).

End Date

Publication end date (e.g. for conferences)

HERDC Category

HERDC category name.

Initial HERDC Category

Initial HERDC category name. As publication types can change, this may differ from **HERDC Category** field.

Is Accepted

Whether nomination has been accepted.

Is Assessed

Whether nomination has been assessed (accepted, accepted internally or declined).

Is Awaiting Assessment

Whether nomination is awaiting assessment.

Is Declined

Whether nomination has been declined.

Is Finalised

Has nomination been finalised (i.e. does it belong to a return that has been finalised)

Is Nominated

Whether nomination has been nominated.

Label

The label field.

Modified When

Last nomination modification date.

Pagination

Publication pagination.

Parent Title

Parent publication's title (e.g. journal title for a journal article)

Place Of Publication

Place of publication.

Publication ID

Publication's unique identifier.

Publication Record ID

A unique identifier for a record used to create a nomination.

Publisher

Publication's publisher name.

Return ID

A unique identifier for HERDC return a publication belongs to.

Return Year

HERDC return's year.

Serial Number

Publication's serial number (e.g. ISSN, ISBN)

Start Date

Publication's start date.

Status

Nomination's status name.

Title

Publication title.

Total Authors

Total number of authors on the nomination.

Total Chapters

Publication's chapter count.

Volume

Publication's volume number.

5.13.50 [HERDC Nomination Affiliation]

An affiliation links a nomination author to a HERDC Group. Each author can be affiliated with several groups on a nomination.

Column	Type	Example value
Author ID	int	1015
Property	nvarchar(100)	
Index	int	0
ID	int	1006
Fraction	decimal	0.5
Group ID	int	1057
Percentage	int	50
Unweighted Points	decimal	0.33333
Weighted Points	decimal	1.66667

Author ID

The ID of the nomination author.

Property

The property list to which this Affilliation belongs. See 5.12 Child tables for more information.

Index

This HERDC Groups's position within the list of groups affiliated to the Author. Zero-based, i.e. the first group in the list has index 0.

ID

A unique identifier of an affiliation.

Fraction

Affiliation's fraction value. Calculated by multiplying nomination's fraction and affiliation percentage.

Group ID

Affiliation HERDC group identifier.

Percentage

Affiliation percentage. It represents author's investment of time/resources with a particular HERDC group on a publication.

Unweighted Points

Affiliation's unweighted points.

Weighted Points

Affiliation's weighted points.

5.13.51 [HERDC Nomination Author]

This table lists users that have authored a nominated publication. Both internal and external authors are listed (external authors are users that were not affiliated with the organisation at the time of publishing)

Column	Type	Example value
Nomination ID	int	837
Property	nvarchar(100)	
Index	int	0
ID	int	1015
Author Name	nvarchar(400)	Hook, DW
Is External	bit	0
Is Finalised	bit	0
Is Main Chapter	bit	1
Nomination ID	int	24
User ID	int	5

Nomination ID

The ID of the HERDC/Annual Collection nomination.

Property

The property list to which this Author belongs. See 5.12 Child tables for more information.

Index

This Author's position in the author list of its parent HERDC Nomination. Zero-based, i.e. the first author in the list has index 0.

ID

Nomination author's unique identifier.

Author Name

Author's name.

Is External

Is author an external author (i.e. whether the user was affiliated with the organisation at the time of publishing).

Is Finalised

Has the HERDC/Annual Collection return been finalised?

Is Main Chapter

For book chapters, is the nominated chapter user's main chapter in the book?

User ID

User's unique identifier.

5.13.52 [HERDC Nomination Checklist Item]

For organisations using our Annual Collection Module (formerly HERDC) the Annual Collection checklist allows administrators and/or assessors to record that the metadata for that nominated publication had been verified in a number of specific ways, aligning with the core ERA metadata requirements. The table captures the outcome of those checks.

Column	Type	Example value
Nomination ID	int	5
Property	nvarchar(100)	
Index	int	3
Item ID	int	5
Is Checked	bit	0
Sort Order	int	3

Nomination ID

ID of the specific annual collection nomination that the checklist has been applied to.

Property

Standard child table column.

Index

Standard child table column.

Item ID

Integer ID of the checklist item. References `[HERDC Return Nomination Checklist Item]`.`ID`.

Is Checked

Flag indicating if the item is checked or not on the nomination.

Sort Order

Indicates the checkbox's place in the page display.

5.13.53 [HERDC Nomination Evidence File]

This table describes the Evidence Files which have been attached to a HERDC nomination.

Column	Type	Example value
Index	int	0
Property	nvarchar(100)	

Description	nvarchar(max)	
Evidence Type	nvarchar(140)	
File Extension	nvarchar(20)	
File ID	int	
File Name	nvarchar(500)	
MIME Type	nvarchar(60)	
Nomination ID	int	

Index

This Evidence File's position in the evidence file list of its parent HERDC Nomination. Zero-based, i.e. the first file in the list has index 0.

Property

The property list to which this Evidence File belongs. See 5.12 Child tables for more information.

Description

A text description of the Evidence File.

Evidence Type

The Evidence Type of the Evidence File.

File Extension

pdf

File ID

1363

File Name

My_HERDC_evidence_file.pdf

MIME Type

application/pdf

Nomination ID

2054

5.13.54 [HERDC Nomination History]

Each action on a HERDC nomination is recorded in the nomination history table. History entries can have user comments attached.

Column	Type	Example value
Nomination ID	int	837
Property	nvarchar(100)	
Index	int	0
ID	int	928
Comment	nvarchar(max)	Please provide additional info
Created On	datetime	2013-04-13 12:03:58:843
Entry Type	nvarchar(100)	information-requested
User ID	int	5

Nomination ID

The unique integer ID of the Nomination that the History entry refers to.

Property

The property list to which this History entry belongs. See 5.12 Child tables for more information.

Index

This History entry's position in the history list of its parent HERDC Nomination. These are returned in descending order by creation time. Zero-based, i.e. the last history item in the list has index 0.

ID

The History entry's unique identifier.

Comment

Descriptive comment.

Created On

The History entry's creation date and time.

Entry Type

Type of the History entry (e.g. nominated)

User ID

ID of the User who performed the action that created this history entry.

5.13.55 [HERDC Return]

This table lists HERDC returns defined in the system.

Records whether or not the Nomination Checklist functionality has been enabled for this Annual Collection (HERDC) Return.

Column	Type	Example value
ID	int	1
Can Edit Year	bit	0
Display Name	nvarchar(200)	HERDC 2014 (2013 Publications)
Finalised By User ID	int	(null)
Finalised On	datetime	(null)
Group Descriptor HR Field	nvarchar(400)	Org Unit Code

Instruction	nvarchar(1000)	2013 Publications for submission to DIISRTE by end June 2014.
Is Default	bit	0
Is Enabled	bit	1
Is Finalised	bit	0
Modified By User ID	int	2
Modified When	datetime	2013-04-10 13:58:03.577
Show Nomination Checklist	bit	1
Year	int	2013

ID

Return's unique identifier.

Can Edit Year

Is it possible to edit return's year (once a return has been enabled, it is not possible to change its year)

Display Name

Return's display name.

Finalised By User ID

Identifies a user that finalised a return.

Finalised On

Date and time a return has been finalised. Empty for non-finalised returns.

Group Descriptor HR Field

HR field used as a source of HERDC group descriptors.

Instruction

Return instruction text.

Is Default

Is the default return?

Is Enabled

Is return enabled?

Is Finalised

Is return finalised?

Modified By User ID

User that last modified return's data.

Modified When

Date and time of last modification.

Show Nomination Checklist

Records whether or not the Nomination Checklist functionality has been enabled for this Annual Collection (HERDC) Return.

Year

Return's year. Only publications published in this year can be nominated for this return.

5.13.56 [HERDC Return Nomination Checklist Item]

For organisations using our Annual Collection Module (formerly HERDC), the Annual Collection checklist allows administrators and/or assessors to record that the metadata for that nominated publication has been verified in a number of specific ways, aligning with the core ERA metadata requirements. This table lists the items defined in the checklist for each return.

Column	Type	Example value
HERDC Return ID	int	234
Property	nvarchar(100)	
Index	int	3
ID	int	12
Display Text	nvarchar(300)	Peer reviewed in full
Sort Order	int	3

HERDC Return ID

Integer ID of the annual collection return to which this checklist item relates. References `[HERDC Return].ID`.

Property

Standard child table column.

Index

Standard child table column.

ID

An integer ID for this checkbox.

Display Text

The text displayed next to the checkbox.

Sort Order

The order each checkbox is displayed on the page.

5.13.57 [HR Log]

The "HR Log" table holds a log of the processing of the user HR import processing, letting the system administrators see any problems with the HR feed provided to the Symplectic Elements system.

Each row in this table represents information about a single processing run of the user feed data that your institution supplies to the Elements system. See the HR Data Import Guide for more information.

Column	Type	Example value

ID	int	1
Active Feed Count	int	1542
Active Non-local User Count	int	1540
Active Overlap Count	int	1520
Cutoff	int	100
Duplicate Authentication Credentials Count	int	2
Duplicate Proprietary ID Count	int	4
Duplicate Public URL Path Fragment Count	int	1
Feed Cleaned Count	int	1490
Feed Total Count	int	1481
Finished When	datetime	2009-02-24 15:09:08.190
Invalid Email Count	int	2
Invalid Public URL Path Fragment Count	int	0
Locally Covered Authentication Credentials Count	int	5
Locally Covered Proprietary ID Count	int	3
Locally Covered Public URL Path Fragment Count	int	2
No Authenticating Authority Count	int	11
No Email Count	int	4
No Last Name Count	int	2
No Proprietary ID Count	int	3
No Username Count	int	1
Started When	datetime	2009-02-24 15:02:24.892
Summary Error Message	nvarchar(max)	(null)
Technical Error Message	nvarchar(max)	(null)
Was Applied	bit	1

ID

The ID of the log entry.

Active Feed Count

An active user is defined as a current user who can log in. This number is the number of valid entries in the feed that represent active users.

Active Non-local User Count

The number of active users currently in the Elements system that are enabled for synchronisation through the HR feed before the feed has been applied.

Active Overlap Count

The number of feed entries in the Active Feed Count that match an existing user in the Active Non-local User Count.

Cutoff

The feed is not always applied. If the analysis of the feed indicated that more users are to be shifted into and out of the Elements system than this cut-off value, then the feed is not applied. The total number of users to be shifted into and out of the Elements by this feed can be calculated from [Active Non-local User Count] + [Active Feed Count] - 2 x [Active Overlap Count].

Duplicate Authentication Credentials Count

The number of invalid entries in the feed discarded because their authentication credentials are duplicated.

Duplicate Proprietary ID Count

The number of invalid entries in the feed discarded because their proprietary ID is duplicated.

Duplicate Public URL Path Fragment Count

The number of invalid entries in the feed discarded because their Public URL Path Fragment is duplicated.

Feed Cleaned Count

The numbers of entries in the feed remaining after invalid rows have been discarded. This includes well-formed entries representing both active and inactive users.

Feed Total Count

The total number of both valid and invalid entries in the feed.

Finished When

The time at which the analysis and application of the feed was completed. The feed may or may not have been applied to the system after it was analysed.

Invalid Email Count

The number of invalid feed rows discarded because the supplied email address was invalid.

Invalid Public URL Path Fragment Count

The number of invalid feed rows discarded because the supplied Public URL Path Fragment was invalid.

Locally Covered Authentication Credentials Count

The number of invalid feed rows invalidated because their authentication credentials match the authentication credentials of a user already in the Elements system that is flagged as not synchronised through the HR feed.

Locally Covered Proprietary ID Count

The number of invalid feed rows invalidated because their proprietary ID matches the proprietary ID of a user already in the Elements system that is flagged as a local user (i.e. not synchronised through the HR feed).

Locally Covered Public URL Path Fragment Count

The number of invalid feed rows invalidated because their Public URL Path Fragment matches the Public URL Path Fragment of a user already in the Elements system that is flagged as a local user (i.e. not synchronised through the HR feed).

No Authenticating Authority Count

The number of invalid feed rows invalidated because no authenticating authority was supplied.

No Email Count

The number of invalid feed rows invalidated because no email address was supplied.

No Last Name Count

The number of invalid feed rows invalidated because no last name was supplied.

No Proprietary ID Count

The number of invalid feed rows invalidated because no proprietary ID was supplied.

No Username Count

The number of invalid feed rows invalidated because no username was supplied.

Started When

The time at which the analysis of the feed was started. The feed may or may not have been applied to the system after it was analysed.

Summary Error Message

A human readable error message for system administrators. This will be NULL if the feed was successfully applied.

Technical Error Message

Technical information associated with any error that caused the HR feed processing to fail. This will be NULL if the feed was successfully applied.

Was Applied

The feed is not always applied. If the analysis of the feed indicated that more users are to be shifted into and out of the Elements system than this cut-off value, then the feed is not applied. The total number of users to be shifted into and out of the Elements by this feed can be calculated from [Active Non-local User Count] + [Active Feed Count] - 2 x [Active Overlap Count].

5.13.58 [Identifier Scheme]

This table contains a list of the Identifier Schemes used by Elements.

Column	Type	Example value
ID	Int	13
Display Name	nvarchar(100)	Crossref ID (DOI)
Name	varchar(50)	crossref-article-id

ID

The unique numeric ID that *Elements* uses for the identifier scheme.

Display Name

The name that *Elements* uses for the identifier scheme in its user interface.

Name

The name that *Elements* uses for the identifier scheme internally.

5.13.59 [Institution]

This table contains a worldwide list of institutions.

Column	Type	Example value
ID	varchar(20)	idb.7445.2
City	nvarchar(400)	London
Country Code	varchar(2)	GB
Geonames City ID	int	2643743
Latitude	real	51.4986
Longitude	real	-0.175478
Name	nvarchar(max)	Imperial College London
Url	nvarchar(400)	http://www3.imperial.ac.uk/
Wikipedia Url	nvarchar(400)	http://en.wikipedia.org/wiki/Imperial_College_London

ID

The IDB identifier of the institution.

City

The name of city in which the institution is located.

Country Code

The two-letter ISO code for the country in which the institution is located.

Geonames City ID

The identifier of the city as used in the GeoNames geographical database.

Latitude

The latitude of the institution's location.

Longitude

The longitude of the institution's location.

Name

The name of the institution.

Url

The URL of the institution's website.

Wikipedia Url

The URL of the Wikipedia article about the institution.

5.13.60 [Label Scheme]

This table holds information on label schemes defined in the system.

Column	Type	Example value
ID	int	3
Description	nvarchar(max)	The Science-Metrix ontology of Science is a controlled…
Display Name	nvarchar(100)	Science-Metrix
Name	nvarchar(50)	Science-Metrix

ID

Unique label scheme identifier.

Description

A description of the label scheme.

Display Name

The label scheme's display name.

Name

The label scheme's system name.

5.13.61 [Label Vocabulary]

This table stores all of the labels defined in the controlled vocabularies (label schemes) of the system, together with scheme and hierarchy info.

Column	Type	Example value
Scheme ID	int	1
Vocabulary ID	nvarchar(100)	0101
Label	nvarchar(200)	0101 Pure Mathematics
Label Code	nvarchar(100)	0101
Label Description	nvarchar(max)	(null)
Parent Vocabulary ID	nvarchar(100)	01

Scheme ID

The ID of the Label Scheme that the label belongs to. References `[Label Scheme].ID`.

Vocabulary ID

A unique label identifier within the label scheme.

Label

The text/value of the label.

Label Code

A code for a label from a controlled vocabulary.

Label Description

A description of a label from a controlled vocabulary.

Parent Vocabulary ID

The vocabulary ID of the label's parent label.

5.13.62 [Link]

The [Link] table lists all links of any type, between all objects, and of any approval status. For any given link in the table:

- the objects that are linked may belong to any Elements category (and any object type within that category).

- where the link is of a type that uses approval status (e.g. the Publication-User "Authored by" link type), the approval status of the link may be "Claimed", "Pending" or "Declined".
- where the link is of a type that does not use approval status (e.g. the Publication-Grant "Funded by" link type), the approval status of the link is always taken to be "Claimed".

Approval status is used for link types that are suggested automatically by the Elements system and require confirmation ("claiming"), either by a human or using a known identifier ("auto claiming"). Other links have been explicitly created either by a human or an institutional system, and so do not require this confirmation. An approved link is also referred to as a "relationship" between the two objects.

N.B. In the context of links:

- "Approved" is a synonym for "Claimed".
- "Rejected" is a synonym for "Declined".
- "Relationship" is a synonym for a claimed link.

Approval Status Basis... columns

This set of columns surface the reason that a link has been approved, e.g. user claiming, identifier-based auto-claiming. Note that the set of data surfaced here may not be complete, especially for older links that were approved before Elements began storing approval reasons (i.e. pre-version 5.14.1). The individual columns are detailed below.

Views on this table

If your query involves only claimed links between two known categories, you can instead use the appropriate [{Category} {Category} Relationship] view on this table. This will allow you to get the result set you need with a simpler, more easily maintable query. These views also maintain backward-compatibility for queries written against versions of the Reporting Database earlier than Elements 5.16.0.

Column	Type	Example value
ID	int	16469
Approval Status	int	1
Approval Status Basis Affiliation	nvarchar(400)	(null)
Approval Status Basis Identifier Scheme ID	int	9
Approval Status Basis Identifier Source Category ID	int	1
Approval Status Basis Identifier Source ID	int	21
Approval Status Basis Identifier Value	nvarchar(200)	0000-0001-9746-1193
Approval Status Basis Name Variant	nvarchar(200)	Hook, Daniel
Approval Status Modified When	datetime	2019-05-02 10:51:03.630
Approval Status Set By Agent ID	int	1
Approval Status Set By Agent Type ID	int	1
Approval Status Set By User ID	int	(null)
Grants View Access	bit	(null)
Is Represented Covariantly	bit	1
Modified When	datetime	2019-05-02 15:25:53.315
Object 1 Category ID	int	1
Object 1 ID	int	66305
Object 1 Percentage	decimal(28,6)	(null)
Object 2 Category ID	int	7
Object 2 ID	int	2014

Object 2 Percentage	decimal(28,6)	(null)
Reporting Date 1	date	(null)
Reporting Date 2	date	(null)
RoleAccess	int	3
Type ID	int	8

ID

An integer ID for the link.

Approval Status

The approval status of the link:

- 1 ⇒ Claimed/Approved
- NULL ⇒ Pending
- 0 ⇒ Declined/Rejected

Links of a link type that do not use approval status are always considered to be approved, i.e. this value will always be 1 for such links.

Approval Status Basis Affiliation

Where the link was suggested because of name- and affiliation-based search settings, this contains the affiliation search term that produced the match.

Approval Status Basis Identifier Scheme ID

Where the link was auto claimed or auto suggested because of a user identifier, this contains the scheme ID of the identifier that produced the match. References `[Identifier Scheme]`**.ID** .

Approval Status Basis Identifier Source Category ID, Approval Status Basis Identifier Source ID

Where the link was auto claimed or auto suggested because of a user identifier, these columns contain the Category ID and ID of the Data Source that produced the record in which the identifier was found. Together, they reference the two-column primary key of the [Data Source] table.

Approval Status Basis Identifier Value

Where the link was auto claimed or auto suggested because of a user identifier, this contains the value of the identifier that produced the match.

Approval Status Basis Name Variant

Where the link was suggested because of name-based search settings, this contains the name variant that produced the match.

Approval Status Modified When

Timestamp showing the most recent time that the approval status changed.

Approval Status Set By Agent ID

An integer ID identifying the agent that set the current approval status. Which table's ID column it references depends on the agent type:

Agent Type	Referenced column
user	`[User].ID`
api-account	`[API Account].ID`
resolver, user-search, object-search, import-tools, unknown-legacy	Always 1. Does not reference any column.

Approval Status Set By Agent Type ID

The integer ID of the type of agent that set the current approval status. References `[Agent Type].ID`.

Approval Status Set By User ID

If the current approval status was set by a user, this will contain that user's integer ID. References `[User].ID`.

Grants View Access

Only relevant to pending links between a user and a non-user object. Indicates whether this link has been marked as granting the user access to view the object, even if the object is private. In practice, this access is granted by an administrator inviting the user to view a private object to which they have a Pending (Restricted) link. If 1, this link grants the user access to view the object. If NULL or 0, it does not grant access. Note that the non-user object may no longer be private, in which case the flag is irrelevant.

Is Represented Covariantly

Each link in Elements is a directed arrow of a given type, pointing from one object to another. The value of this column tells you in which direction the link is pointing:

- 1 ⇒ from Object 1 to Object 2
- 0 ⇒ from Object 2 to Object 1

One use of this is to select the appropriate link type description when reporting on links. See the CASE expression in this example:

```
-- Get a count of links for each link type
SELECT  c1.[Heading Singular] "Category 1"
        ,CASE l.[Is Represented Covariantly]
            WHEN 1 THEN rt.[Name]
            ELSE rt.[Reversed Name]
        END "Link type"
        ,c2.[Heading Singular] "Category 2"
        ,COUNT(1) "Count of links"
FROM    [Link] l
        JOIN [Category] c1 ON c1.ID = l.[Object 1 Category ID]
        JOIN [Category] c2 ON c2.ID = l.[Object 2 Category ID]
        JOIN [Relationship Type] rt ON rt.ID = l.[Type ID]
GROUP BY c1.[Heading Singular]
        ,c2.[Heading Singular]
        ,l.[Is Represented Covariantly]
        ,rt.[Name]
        ,rt.[Reversed Name]
;
```

Modified When

Timestamp showing the most recent time that the link was modified.

Object 1 Category ID, Object 2 Category ID

The integer ID of the category to which each object belongs. References `[Category].ID`.

Object 1 ID, Object 2 ID

The integer ID of each object.

Object 1 Percentage, Object 2 Percentage

Where the link is of a link type that allows percentage setting

Reporting Date 1, Reporting Date 2

For links of a type that use Reporting Date(s), these columns will contain those dates, where they are set. The [Relationship Type] table details which link types use which Reporting Dates.

Note that these Reporting Dates on the link are distinct from any Reporting Dates on the linked objects themselves. For example, User objects do not have reporting dates, but a "Collaborator of" link between two Users may have both reporting dates set, representing the period of the collaboration between them.

For links of a type that use Reporting Date 1, this will contain that date, if it is set.

RoleAccess

Internal use only. Do not include this value in any result sets.

Type ID

The integer ID of the link type. References `[Relationship Type].ID`

5.13.63 [Login Log]

This table lists the user logins into the Elements website.

Column	Type	Example value
Time	datetime	2009-02-24 15:09:08.190
User ID	int	1542

Time

The time the user logged in.

User ID

The Elements user ID of the user who logged in. References `[User].ID`.

5.13.64 [OA Policy]

Column	Type	Example value
ID	int	40
Enable Claim And Upload For Pending	bit	1
Enable On Acceptance Wizard	bit	0
Exclude After User Leave Date	bit	1
Exclude Before User Arrive Date	bit	1
Exclude Conferences Without Issn	bit	0
Exclude Inactive Users	bit	1
Exclude When Embargo Requested	bit	0
Exclude When Indefinite Embargo Requested	bit	1
Max Embargo For File Versions In Days	int	365
Name	nvarchar(250)	Lilliput University Institutional Policy
On Acceptance Guidance Text	nvarchar(max)	Lilliput University policy requires peer-reviewed articles and conference proceedings to be made available through its institutional repository when they are accepted for publication. When a journal accepts your paper for publication, deposit it before you sign any copyright or Open Access agreements. You should upload your Author's Accepted Manuscript. This is your version of the manuscript after peer review and including any final changes but before publisher typesetting or copy-editing by the publisher.
Primary Source Date	nvarchar(10)	published

ID

The unique identifier for the OA Policy.

Enable Claim And Upload For Pending

Identifies whether the "Claim-Plus" workflow has been enabled to prompt users to upload publications to the repository as a part of claiming a publication.

Enable On Acceptance Wizard

Identifies whether the "On Acceptance" Wizard has been enabled to prompt users to submit metadata upload publications for accepted publications.

Exclude After User Leave Date

Identifies whether the policy has been configured to exclude publications published after the User Leave date.

Exclude Before User Arrive Date

Identifies whether the policy has been configured to exclude publications published before the User Arrive date.

Exclude Conferences Without Issn

Identifies whether the policy has been configured to exclude conference publications without an ISSN.

Exclude When Embargo Requested

Identifies whether the policy has been configured to exclude publications which have requested an embargo.

Exclude When Indefinite Embargo Requested

Identifies whether the policy has been configured to exclude publications which have requested an indefinite embargo.

Max Embargo For File Versions In Days

Identifies the length set in days for the maximum permitted embargo for files. If blank, no maximum permitted embargo has been set.

Name

The name of the OA Policy

On Acceptance Guidance Text

The On Acceptance Guidance text configured within the OA Policy Settings Page.

Primary Source Date

Reflects which date has been selected as the Primary Source Date for the OA Monitor.

5.13.65 [Pending User Identifier]

This view on the [User Identifier] table lists only identifiers that are pending for users, i.e. the identifier has been suggested as possibly identifying the user but no decision has yet been taken about how, or whether, to use the identifier in the automatic approval process for the user. It excludes the columns of [User Identifier] that are not relevant to pending identifiers.

Column	Type	Example value
User ID	int	7152
Identifier Scheme ID	int	10
Identifier Value	nvarchar(200)	8973030600
Status Modified When	datetime	2019-07-09 09:37:05.487
Status Set By Agent ID	int	3018
Status Set By Agent Type ID	int	4
Status Set By User ID	int	3018

For descriptions of each column, see the documentation for the [User Identifier] table.

5.13.66 [Phone Number Type]

This table lists the types of phone numbers that can be set on a user profile.

Column	Type	Example value
Type ID	int	1
Type Name	nvarchar(20)	Work

ID

The system integer ID of the type of phone number.

Type Name

The descriptive name of the type of phone number.

5.13.67 [Privacy Resource Types]

Information and preferences for a privacy resource type, i.e. a type of data resource (other than objects) that supports the concept of privacy levels. A link between a user and non-user is an example of one such type of data resource.

Column	Type	Example value
ID	int	123
Allow User Control	bit	
Allow User Control Modified When	datetime	2023-07-09 09:37:05.487
Default Privacy Level	nvarchar(10)	Public
Default Privacy Level Modified When	datetime	2023-07-09 09:37:05.487
Name	nvarchar(50)	

ID

The type of resource.

Allow User Control

Whether users should be offered control over privacy levels for this type of resource.

Allow User Control Modified When

When the AllowUserControl option was last modified, and null if it has never been modified.

Default Privacy Level

A display name for the privacy level assigned to this resource type, e.g. "Private", "Public". Note that this value may have been sourced by the level at which newly created instances of data of this type is set to, or might be the fall-back value for all instances of data of this type which have not had an explicit privacy level set for them.

Default Privacy Level Modified When

When the DefaultPrivacyLevel was last modified. Null if it has never been modified.

Name

The identifying name of the type of resource, in Symplectic string identifier format (lowercase hyphenated).

5.13.68 [Postgraduate Training Type]

This table lists the types of postgraduate training that can be set on a user profile.

Column	Type	Example value
Type ID	int	1
Type Name	nvarchar(20)	Postdoctoral Research

ID

The system integer ID of the type of postgraduate training.

Type Name

The descriptive name of the type of postgraduate training.

5.13.69 [Relationship Type]

This table lists all the types of object-to-object links that can be created in the system.

For historical reasons, this table is called [Relationship Type], rather than the more semantically correct [Link Type].

Column	Type	Example value
ID	int	8
From Category	nvarchar(100)	Publication
From Category ID	int	1
Name	nvarchar(100)	Authored by
Reversed Name	nvarchar(100)	Author of
RoleAccess	int	3
To Category	nvarchar(100)	User
To Category ID	int	7
Uses Approval Status Flag	bit	1
Uses Reporting Date 1	bit	1
Uses Reporting Date 2	bit	0

ID

The system integer ID of the type of relationship.

From Category

The name of the category of objects from which this relationship links (i.e. the category of Object 1 in the [Link] table).

From Category ID

The internal integer ID of the From Category. References `[Category].ID`.

Name

The descriptive name of the relationship type.

Reversed Name

The descriptive name of the relationship type in the opposite direction.

RoleAccess

Internal use only. Do not include this value in any result sets.

To Category

The name of the category of objects to which this relationship links (i.e. the category of Object 2 in the [Link] table).

To Category ID

The internal integer ID of the To Category. References `[Category]`.`ID` .

Uses Approval Status Flag

Whether relationships of this type must be approved (claimed), either by a user of the system or automatically using a known identifier.

Uses Reporting Date 1, Uses Reporting Date 2

Whether relationships of this type support the use of Reporting Date 1 and Reporting Date 2 respectively.

5.13.70 [Repository Item]

> **N.B.** This table and its child table [Repository Item File] are only populated with data from repositories connected using the older Repository Tools 1 (RT1) technology. Data from repositories connected via the newer Repository Tools 2 can be found in the [Publication Record] and [Publication Record File] tables by restricting query results to records from the repository data source.

Symplectic Elements interoperates closely with your institution's digital repository, providing it with publication metadata and full text upload from the users of the Symplectic Elements system.

This table represents a cache of information reported back by the repository about contents that have been uploaded via Symplectic Elements.

Each row represents information about repository contents for a given Symplectic Elements publication.

Column	Type	Example value
Publication ID	int	9598
Content File Count	int	2
Created When	datetime	2015-08-13 17:02:04
Existed Before v4 14	bit	0
First File Uploaded When	datetime	2015-08-13 17:00:34
First Licence Uploaded When	datetime	2015-08-13 17:00:34
Licence File Count	int	1
Modified When	datetime	2015-08-13 17:02:04
Public URL	nvarchar(500)	(null)
Status	nvarchar(50)	In Review

Publication ID

The Elements publication ID to which the rest of the data corresponds.

Content File Count

How many full text (or other) files exist in the repository for this publication.

Created When

When the publication was first imported into the digital repository from Symplectic Elements.

Existed Before v4 14

Determining a publication's compliance with an OA policy can involve checking its date of first deposit. This was not tracked in versions of Elements prior to v4.14, so repository items that existed before then are marked with this flag.

First File Uploaded When

The time of upload to the repository of the first content file by a user via the Symplectic Elements user interface.

First Licence Uploaded When

Usually, only one licence per publication is ever stored in the repository. This value indicates when an author of the publication used the Symplectic Elements user interface to license the publications files in the repository for public archiving.

Licence File Count

The number of licence files have been uploaded to the repository by Symplectic Elements.

Modified When

The date and time indicating when the cached data was last modified.

Public URL

The persistent URL assigned to the publication by the digital repository. If NULL, the repository has not yet made the publication and its files public.

Status

Repository item status, as reported by the repository. If a repository does not provide status information, the value is set to *Unknown*.

5.13.71 [Repository Item File]

> **N.B.** This table and its parent table [Repository Item] are only populated with data from repositories connected using the older Repository Tools 1 (RT1) technology. Data from repositories connected via the newer Repository Tools 2 can be found in the [Publication Record] and [Publication Record File] tables by restricting query results to records from the repository data source.

This table contains metadata about the files deposited to an institutional repository via a Repository Tools 1 (RT1) connection.

Column	Type	Example value
Index	int	0
Property	nvarchar(100)	(null)
Embargo Release Date	datetime	2019-03-01 00:00:00
Filename	nvarchar(400)	article_full_text.pdf
Indefinitely Embargoed	bit	0
Last Updated At Source When	datetime	2019-05-15 15:18:13
MIME Type	nvarchar(50)	application/pdf

Never Embargoed	bit	0
Proprietary ID	nvarchar(200)	http://dspace.lilliput.edu:8097/rt4ds/file/144/9911492v1.pdf
Public URL	nvarchar(400)	http://dspace.lilliput.edu:8097/jspui/bitstream/123456789/88/1/9911492v1.pdf
Repository Item Publication ID	int	13389
Version	nvarchar(100)	Published version.

Index

This Repository File's position in the repository file list of its parent Repository Item. Zero-based, i.e. the first file in the list has index 0.

Property

The property list to which this Repository File belongs. See 5.12 Child tables for more information.

Embargo Release Date

Embargo expiration date for the file (if this exists and is known to Elements). When this is NULL, the file is either indefinitely embargoed or has no embargo at all.

Filename

publication_full_text.pdf

Indefinitely Embargoed

Whether the file in the repository is indefinitely embargoed, according to data received by Elements from the repository.

Last Updated At Source When

The time that the file was last updated in the repository, if known.

MIME Type

The MIME type of the deposited file.

Never Embargoed

Whether the file has never had an embargo. This is true exactly when "Embargo Release Date" is NULL and "Indefinitely Embargoed" is false.

Proprietary ID

The unique ID of the file according to the repository.

Public URL

The URL at which the repository item may be publicly viewed (if such a URL exists).

Repository Item Publication ID

The integer ID of the parent item in the Repository Item table.

Version

The version of the file as stated by the repository.

5.13.72 [Research Funding Lookup Value]   RFS schema

This table contains details of simple 'lookup values' used by the Research Funding Solution. For each type of lookup value, a restricted list of possible values is defined by this table. Each value has a GUID (Globally Unique IDentifier) and a text value.

This base table contains all lookup values across all RFS data types, making it awkward to use for most cases. For each individual RFS data type, the lookup values are broken out in the corresponding [Research Funding Lookup *] view derived from this table. In most cases where a lookup is needed, it will be more convenient to use the appropriate view rather than this base table.

Column	Type	Example value
GUID	uniqueidentifier	6C1A4893-A845-4B2B-8864-39BE3F6C7305
Name	nvarchar(100)	Under Review
Parent Type ID	int	(null)
Parent Value GUID	uniqueidentifier	(null)
Type ID	int	5
Type Name	nvarchar(100)	Proposal Status

GUID

Unique identifier for a lookup value.

Name

Display name for the lookup value

Parent Type ID

ID for the parent type of the lookup value. Usually NULL.

Parent Value GUID

Unique identifier for the value of a parent type of the lookup value. Usually NULL.

Type ID

ID for the type of the lookup value.

Type Name

Display name for the type of the lookup value.

5.13.73 [Research Funding Lookup *]   RFS schema

This set of views on the [Research Funding Lookup Value] table provides an easy way of looking up a research funding value when the RFS data type is known in advance. Each view contains the lookup values for a particular RFS data type, e.g. [Research Funding Lookup Currency] contains all the lookup values for fields with RFS data type Currency.

Column	Type	Example value
GUID	uniqueidentifier	374A8736-B7A4-4077-B618-06E77D4159A0
Name	nvarchar(100)	Turkish Lira

GUID

Unique identifier for a lookup value.

Name

Display name for the lookup value.

5.13.74 [Search Log]

The search log table holds a log of online search attempts for the users of the system configured for online searches.

Each row represents a summary of the results of a search on a single online data source for one user.

Column	Type	Example value
ID	int	1
Admin Error Message	nvarchar(max)	(null)
Author ID Search String	nvarchar(max)	(null)
Commit Hash	varchar(40)	6e432a30bcb5fb2911fb6257a63234caae48a922
Data Source	nvarchar(100)	PubMed
Duration in Milliseconds	int	156
Elements Version	nvarchar(max)	4.16.0.684
Had Problems	bit	0
Search Terms Ever Modified	bit	1
Searched When	datetime	2015-08-27 05:11:21.837
Succeeded	bit	1
Technical Error Message	nvarchar(max)	(null)
Total Approved Count	int	17
Total Declined Count	int	0
Total Pending Count	int	4
User Error Message	nvarchar(max)	(null)
User ID	int	30

ID

An ID for the log entry.

Admin Error Message

If the search failed, this error message is made available to system administrators.

Author ID Search String

If the search involved asking the data source for publications corresponding to a certain author identification scheme implemented by the data source, this is the author identifier sent to the search source.

Commit Hash

The codebase identifier of the Symplectic Elements system when the search was initiated. This is another identifier of the version of Symplectic Elements.

Data Source

The name of the data source searched. See the "Publication Source" table.

Duration in Milliseconds

The number of milliseconds it took to perform the search.

Elements Version

The version of Elements from which the search was initiated.

Had Problems

Corresponds to whether there is any error message associated with this search.

Sometimes a search can succeed, but there is still a warning message from the data source for the user, indicating that the search might not have returned the intended results, or similar. In this case, a User Error Message will be supplied, the search will be flagged as Succeeded but Had Problems.

Search Terms Ever Modified

Indicates whether the user has ever modified his or her own search terms in the Symplectic Elements user interface. This can be useful information when assessing which users to contact to help improve the accuracy of the online searches.

Searched When

When the search occurred.

Succeeded

Whether or not the online search succeeded.

Technical Error Message

A full error report suitable for feedback to Symplectic's technical staff.

It is quite normal to experience regular errors in searches through no fault of the system. However, in the case where there is a bug in the product, this error message can be useful.

Total Approved Count

The total number of approved publications for this user after the search was completed.

Total Declined Count

The total number of declined publications for this user after the search was completed.

Total Pending Count

The total number of publications pending an authorship decision for this user after the search was completed.

User Error Message

Any warning or error message reported directly back to the user as a consequence of this search.

User ID

The user for whom this search was performed.

5.13.75 [System Log]

The system log table holds a log of important system events that can help diagnose problems with the system.

Column	Type	Example value

ID	int	1
Application	nvarchar(100)	Website
Code	nvarchar(100)	User login
Commit Hash	varchar(40)	6e432a30bcb5fb2911fb6257a63234caae48a922
Elements Version	nvarchar(max)	5.12.0.1852
Impersonated User ID	int	1
IP Address	nvarchar(39)	(null)
Level	int	5
Operation	nvarchar(max)	Website application start-up
Procedure	nvarchar(200)	(null)
Process ID	int	4352
Summary Message	nvarchar(max)	The website application has started.
Technical Details	nvarchar(max)	(null)
Time	datetime	2015-08-27 16:47:13.537
Type	nvarchar(50)	Information
User ID	int	1

ID

The ID of the log entry.

Application

Which part of the system submitted the log entry.

Code

A code for the log entry. Not all log entries have a code.

Commit Hash

The codebase identifier of the Symplectic Elements system when the log entry was generated. This is another identifier of the version of Symplectic Elements.

Elements Version

The version of Elements.

Impersonated User ID

Which user was being impersonated at the time of submission of the log entry. See the Symplectic Elements User Guide for more information about user impersonation.

IP Address

Any IP address associated with the event that caused the log entry. This is often the IP address of a user using the system through a web browser.

Level

A rough level of importance of the event. Ranges from 1 (least important) to 10 (most important).

Operation

The operation being performed by the system at the time of the event.

Procedure

Any Symplectic Elements database stored procedure associated with the event. This can be useful for Symplectic to know for debugging purposes.

Process ID

The operating system process ID of the process in which the event occurred.

Summary Message

A message describing the event.

Technical Details

A machine-generated technical message associated with the event. This can be useful for Symplectic for debugging purposes.

Time

The time of the event.

Type

The type of event (information, warning, error).

User ID

The user who performed the action that caused the event.

5.13.76 [User Identifier]

Introduced in version 5.16.0, the [User Identifier] table replaces the [User Identifier Association] table and significantly extends its functionality.

The [User Identifier] table contains *all* identifiers in the system, whether claimed (i.e. set to auto claim or auto suggest objects), pending or declined (i.e. set to ignore or auto-reject objects). For ORCID identifiers, it is also possible to determine whether a connection to the corresponding ORCID account has been made and is currently active. Possible new uses include calculating the percentage of users who have an active Elements to ORCID connection, or reporting on identifiers that have been suggested but not acted upon by the user. The three views [Claimed User Identifier], [Pending User Identifier] and [Declined User Identifier] provide cut-down versions of this table containing only user identifiers with the corresponding approval status.

Column	Type	Example value
User ID	int	3423
Identifier Scheme ID	int	9
Identifier Value	nvarchar(200)	0000-0001-9746-1193
Is Claimed	bit	1
Is Connection Configured	bit	1
Is Connection Write Capable	bit	1
Is Connection Known To Be Broken	bit	0
Is Declined	bit	0
Is Pending	bit	0
Should Auto-claim	bit	1
Should Auto-reject	bit	0
Should Auto-suggest	bit	0
Should Ignore	bit	0

Status Modified When	datetime	2019-07-09 09:37:05.487
Status Set By Agent ID	int	3018
Status Set By Agent Type ID	int	4
Status Set By User ID	int	3018

User ID

The integer ID of the user with whom the identifier is associated. References `[User].ID`.

Identifier Scheme ID

The integer ID of the scheme to which the identifier belongs. References `[Identifier Scheme].ID`.

Identifier Value

The value of the identifier.

Is Claimed

Whether or not the identifier is claimed for the user, i.e. has been set to auto-claim or auto-suggest.

Is Connection Configured

Where an identifier can be used to establish a connection with an external service (e.g. ORCID), this indicates whether that connection has been configured.

Where an identifier cannot be used in this way, this will be NULL.

Is Connection Known To Be Broken

Where an identifier can be used to establish a connection with an external service (e.g. ORCID), this indicates whether a previously configured connection is known to be broken, for example, by an authentication token expiring or being revoked.

Where an identifier cannot be used in this way or the connection has not been configured, this will be NULL.

Is Connection Write Capable

Where an identifier can be used to establish a connection with an external service (e.g. ORCID), this indicates whether a configured connection has the capability to write data to that service.

Note that a value of 1 does not guarantee that the configured credentials are valid, only that write capability has been configured in Elements. To detect broken connections, use the `Is Connection Known To Be Broken` column instead.

Where an identifier cannot be used in this way or the connection has not been configured, this will be NULL.

Is Declined

Whether or not the identifier is declined for the user, i.e. has been set to ignore or auto-reject.

Is Pending

Whether or not the identifier is pending for the user, i.e. no preferred action has yet been specified.

Should Auto-claim

Whether or not the identifier should be used to auto-claim objects (e.g. publications and grants) for the user.

Should Auto-reject

Whether or not the identifier should be used to auto-reject objects (e.g. publications and grants) for the user.

Should Auto-suggest

Whether or not the identifier should be used to auto-suggest objects (e.g. publications and grants) for the user.

Should Ignore

Whether or not the identifier should be ignored when making automatic approval decisions for the user.

Status Modified When

When the last modification to the drop-down option for this user/identifier association was made.

Status Set By Agent ID

Which agent last set the drop-down option for this user/identifier association. This value will have a different meaning for each agent type, as appropriate - note that all agents of type other than 'user' or 'api-account' will have their Agent ID value constrained to 1.

Status Set By Agent Type ID

Which type of agent last set the drop-down option for this user/identifier association. References `[Agent Type].ID`.

Status Set By User ID

If the identifier's current status was set by a user, the integer ID of that user. References `[User].ID`.

5.13.77 [User Record Embeddable Media]

Captures metadata associated with videos added to the Media section on the Elements User Profile page.

Column	Type	Example value
User Record ID	int	155182
Property	nvarchar(100)	
Index	int	0
Description	nvarchar(max)	A public health imformation video by the World Health Organization information. Title screen with the WHO logo and the title "How is COVID-19 spread and how do you protect yourself against it? Title fades, a diagram of the virus is drawn on screen...
Embed Link	varchar(100)	https://www.youtube.com/embed/1APwq1df6Mw?rel=0
Label	nvarchar(max)	World Health Organization information video: How to protect yourself against COVID-19
Proprietary ID	varchar(50)	1APwq1df6Mw
Thumbnail Link	varchar(100)	https://i.ytimg.com/vi/1APwq1df6Mw/hqdefault.jpg
Type ID	int	1
View Link	varchar(100)	https://www.youtube.com/watch?v=1APwq1df6Mw

User Record ID

References `[User Record].ID`.

N.B. `[User Record].ID` is distinct from `[User].ID`!

Property

Standard child table column.

Index

Standard child table column.

Description

Captures an accessible description the user is asked to provide for the media file. Should be used as screen reader accessible description in the final interface.

Embed Link

A link to be included in the `src` attribute of an embedding `<iframe>` HTML element.

Label

A text label for the media. Shown in the user's Elements profile.

Proprietary ID

ID at the source which is hosting the media. (eg. a Youtube ID).

Thumbnail Link

A link for a thumbnail of the media, to be used in the `scr` attribute of an `<img>` HTML element.

Type ID

ID for the 'type' of media stored. References `[Embeddable Media Type].ID`.

View Link

Link to view the media at the hosting resource. Note this link will not work in an `<iframe>`.

5.13.78 [User Search Term Defaults]

Each user for whom online searches are performed has a set of default online search terms.

In addition, for each data source, the user can opt to override these default search terms (see the "User Search Term Overrides" table.

Column	Type	Example value
User ID	int	1
Affiliation	nvarchar(max)	"Your institution name" OR "Your institution previous name"
Author	nvarchar(max)	"Smith J D" OR "Smith, John D"
Journal	nvarchar(max)	(null)
Keyword	nvarchar(max)	(null)
Start Date	nvarchar(10)	2008-04-05

User ID

The user to whom these search terms apply.

Affiliation

The default affiliation search term for the user. Only publications published by at least one author whose affiliation (at the time of publication) match this expression should be returned.

Author

The default author search term for the user. Only publications published by authors matching this expression should be returned.

Journal

The default journal search term for the user. Only publications published in journals matching this expression should be returned.

Keyword

The default keyword search term for the user. Only publications with these keywords should be returned.

Start Date

A start date associated with the search. Only publications published after this date should be returned. The format of the date is one of yyyy, yyyy-mm, and yyyy-mm-dd.

5.13.79 [User Search Term Overrides]

For each data source, a user can opt to override their default search terms. This table contains one row per user/publication source combination, giving the details of any search terms in use by that user that are particular to that data source.

Column	Type	Example value
User ID	int	5
Category ID	int	1
Source ID	int	2
Affiliation Override	nvarchar(max)	(null)
Author Override	nvarchar(max)	(null)
Journal Override	nvarchar(max)	(null)
Keyword Override	nvarchar(max)	"high energy physics" OR "hep"
Override Affiliation	bit	0
Override Author	bit	0
Override Journal	bit	0
Override Keyword	bit	1
Override Start Date	bit	0
Proprietary IDs	nvarchar(max)	00001231342345, 00001232355633
Should Run Name Search	bit	1
Source Name	nvarchar(100)	PubMed
Start Date Override	nvarchar(10)	(null)

User ID

The integer ID of the user to whom these search terms apply.

Category ID

The integer ID of the category to which these search terms apply. References `[Category].ID`.

Source ID

The integer ID of the source to which these search terms apply. References `[{Category} Source].ID` for the appropriate category.

Affiliation Override

A value to override the default affiliation search term for this user.

Author Override

A value to override the default author search term for this user.

Journal Override

A value to override the default journal search term for this user.

Keyword Override

A value to override the default keyword search term for this user.

Override Affiliation

Whether the user is overriding the default affiliation search term for this data source.

Override Author

Whether the user is overriding the default author search term for this data source.

Override Journal

Whether the user is overriding the default journal search term for this data source.

Override Keyword

Whether the user is overriding the default keyword search term for this data source.

Override Start Date

Whether the user is overriding the default start date search term for this data source.

Proprietary IDs

A list of particular publication IDs to be fetched directly for this user (in addition to the usual search results).

Should Run Name Search

Whether the user's name-based search will be run for this data source.

Source Name

The name of the data source to search (see the Publication Source table).

Start Date Override

A value to override the default start date search term for this user. The format of the date is one of yyyy, yyyy-mm, and yyyy-mm-dd.

5.13.80 [Waiver Request]

Each row details the possible classifications of web addresses.

Column	Type	Example value

ID	int	1
Created When	datetime	2016-06-30 13:22:36.997
Publication Authors	nvarchar(max)	Li B; Ning B; Xu C; Zhang S
Publication ID	Int	135729
Publication ISSN	nvarchar(max)	0195-669
Publication Journal	nvarchar(max)	European Journal of Combinatorics
Publication Publisher	nvarchar(max)	(null)
Publication Title	nvarchar(max)	Rainbow triangles in edge-colored graphs
Requesting User Address	nvarchar(max)	23 Main St, MAINSVILLE, Maine, USA
Requesting User Comment	nvarchar(max)	At publisher's request
Requesting User ID	Int	504
Requesting User Name	nvarchar(max)	Mr Jonathan Miller
Successor ID	int	(null)

ID

The unique identifier for this waiver request.

Created When

The date and time when the waiver request was made.

Publication Authors

A snapshot of the bibliographic authors of the publication, taken at the time the waiver request was made.

Publication ID

The unique identifier of the Elements Publication object about which the waiver request was made. This can be used to obtain more recent data about this publication than the "snapshot" data in the other columns.

Publication ISSN

A snapshot of the ISSN for the journal/conference proceedings, taken at the time the waiver request was made.

Publication Journal

A snapshot of the journal/conference proceedings title, taken at the time the waiver request was made.

Publication Publisher

A snapshot of the journal/conference proceedings publisher name, taken at the time the waiver request was made.

Publication Title

A snapshot of the journal article/conference proceedings publication-level title, taken at the time the waiver request was made.

Requesting User Address

The address captured from the requesting user at the time the waiver request was made.

Requesting User Comment

The comments captured from the requesting user at the time the waiver request was made.

Requesting User ID

The unique identifier in Elements for user making this waiver request.

Requesting User Name

The username of the user making this waiver request.

Successor ID

In the case where a more recent waiver request has been made by the same user, for the same publication, this will contain the unique identifier of that more recent (successor) request; otherwise this field will be NULL.

5.13.81 [Web Address Type]

Each row details the possible classifications of web addresses.

Column	Type	Example value
Type ID	int	3
Type Name	nvarchar(20)	Blog

Type ID

The integer ID used to refer to web address types.

Type Name

A descriptive name of the type of web address.

6 META and DEF tables

There are several tables that are used to store metadata relating to the reporting database. These are not relevant to reporting on Elements data, but are instead used by the system to manage synchronisation of the reportable data. They should generally not be used in reporting queries, other than to check for database availability as described in section 4.5.3 Do not use the Reporting Database during a full reload.

7 Change history

7.1 Changes from v6.3.0 to v6.4.0

As always, we recommend you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

7.1.1 New tables

All new tables in 6.4.0 belong to the new `rfs` schema.

A number of new tables were added in 6.4.0 belonging to both the `rfs` and standard `dbo` schema.

Standard dbo schema;

- [Privacy Resource Types]
- [* Ancestor]

`rfs` schema;

- [Duplicate Research Funding Review Suggestion]
- [Research Funding Lookup Proposal Outcome]
- [Research Funding Lookup Review Outcome]
- [Research Funding Lookup Review Status]
- [Research Funding Lookup Review Type]
- [Research Funding Proposal Research Funding Review Relationship]
- [Research Funding Review]
- [Research Funding Review Field]
- [Research Funding Review Source]
- [Research Funding Review Type]
- [Research Funding Review User Relationship]
- [Research Funding Review Record Address]
- [Research Funding Proposal Record File]
- [Research Funding Review History]
- [Research Funding Review Record Identifier]
- [Research Funding Review Label]
- [Research Funding Review Record]
- [User Research Funding Review Preferences]
- [Research Funding Review Record Role]

'Research Funding Review' represents a new category added to the `rfs` schema. This data category includes many standard child tables. See the table descriptions for details.

7.1.2 Deleted columns

In this release some columns were removed from the [Publication], [Publication Record] and [Publication (Display Names)] tables. More information about this change and how to account for it can be found in this support article. The following columns were deleted:

- `[Canonical journal title]`
- `[Journal data source]`
- `[Journal ID]`
- `[Sherpa Romeo Data]`

The [Sherpa Romeo Data] column value has been moved to a new column of the same name in the [Journal] table.

7.1.3 New columns

Alongside the new columns associated with the new tables and the `rfs` schema, a number of new columns have been added to existing tables in the dbo schema.

[Category]:

- [Allow User Privacy Control]
- [Allow User Privacy Control Modified When]
- [Default Privacy Level]
- [Default Privacy Level Modified When]

[Data Source]:

- [Holds Citation Counts]
- [Is Active]

[User]:

- [Admin Privacy Level]
- [Admin Privacy Level Modified When]
- [Institutional Email Admin Privacy Level]
- [Institutional Email Admin Privacy Level Modified When]
- [Institutional Email User Privacy Level]
- [Institutional Email User Privacy Level Modified When]
- [Profile URL]
- [User Privacy Level]
- [User Privacy Level Modified When]

[{Category} Field]:

- [Is UI Locked]

7.2 Changes from v6.2.0 to v6.3.0

As always, we recommend you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

7.2.1 New tables

All new tables in 6.2.0 belong to the new `rfs` schema.

- [* Application Form]
- [* Data]

See the table descriptions for details

7.2.2 Deleted columns

As part of an update into the structure of `rfs` data in the Reporting Database a number of columns were deleted.

Research Funding Opportunity Record;

- [additional-data]
- [funder]
- [record-created-at-source-date]
- [record-last-modified-at-source-date]

Research Funding Organisation Record;

- [additional-data]
- [record-created-at-source-date]
- [record-last-modified-at-source-date]

Research Funding Proposal Record;

- [additional-data]
- [internal-submitted-date]
- [record-created-at-source-date]
- [record-last-modified-at-source-date]

7.2.3 New columns

There are a number of new columns in the `rfs` schema. These are documented under the appropriate tables.

In the dbo schema, there are several new `[Has Thumbnail]` columns that indicate whether or not the object has an associated thumbnail. This column is null if the object type does not support thumbnails.

7.3 Changes from v6.1.0 to v6.2.0

As always, we recommend you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

7.3.1 Object-level privacy

Elements 6.2.0 introduces the ability to set a privacy level directly on an object (e.g. a publication, grant, teaching activity, etc.) Previously, privacy levels could only be set on a user's *relationship* with an object, or on their own HR or profile data. This new functionality means that an object itself can in be marked as Public, Internal or Private. This is reflected in the reporting database by the addition of a `Privacy Level` column to each [{Category}] table:

- [Assessment Supporting Information].[Privacy Level]
- [Deposit Advice].[Privacy Level]
- [Equipment].[Privacy Level]
- [Funding Body].[Privacy Level]
- [Grant].[Privacy Level]
- [Impact].[Privacy Level]
- [Journal].[Privacy Level]
- [Organisational Structure].[Privacy Level]
- [Professional Activity].[Privacy Level]
- [Project].[Privacy Level]
- [Publication].[Privacy Level]
- [Research Funding Opportunity].[Privacy Level]
- [Research Funding Organisation].[Privacy Level]
- [Research Funding Proposal].[Privacy Level]
- [Teaching Activity].[Privacy Level]

Note that data in the Reporting Database is not filtered by privacy level. Anyone with direct access to a table or view will see all data at all privacy levels. Is it the responsibility of each data consumer to choose the appropriate privacy level for their purpose and filter their results accordingly. It is the responsibility of your institution's database administrator/owner to ensure that only appropriate people are given access to the raw data, and that they fully understand their responsibilities with respect to privacy and data protection.

For more information, see sections 2 Privacy and Data Protection in the Reporting Database and 5.4 Privacy Level columns, and the support article Introducing Object Privacy (v6.2 Onwards).

7.3.2 The Research Funding Solution in the Reporting Database

Elements 6.2.0 introduces the Research Funding Solution (RFS), which supports institutions in finding funding opportunities, developing proposals, monitoring funded projects, and other funding-related activities. The potentially sensitive nature of this data and the incorporation of existing technologies requires a approach to RFS data that differs in some ways from other Reporting Database data.

7.3.3 New schema

To keep RFS data clearly separated from other reporting database data, the reporting database has a new `rfs` schema. Using a separate schema allows permission to view RFS data to be controlled separately to the rest of the database. Any reporting database user who should not have access to RFS should be granted SELECT permission on the `dbo` schema only. To give a user access to the full set of data, including RFS data, grant them SELECT permission on the `dbo` and `rfs` schemas.

7.3.4 New database role

To aid the management of access to RFS data, a new role has been added to the database, `elements-stock-rfs-reporting-consumer`. Membership of this role grants access to the new `rfs` schema. For details, see section 2.3 Research Funding Solution data.

7.3.5 New tables

All new tables in 6.2.0 belong to the new `rfs` schema. There are three new categories of Research Funding object, each with a corresponding [{Category}] table:

- [Research Funding Opportunity]
- [Research Funding Organisation]
- [Research Funding Proposal]

Each of these has the usual [{Category} Record], [{Category} Label] and other child tables, [User {Category} Preferences], [Duplicate {Category} Suggestion], and [{Category} {Category} Relationship] tables that are associated with any [{Category}] table. These tables can be joined in the same way as similar tables associated with any other category, (e.g. Publications).

Two new classes of tables specific to RFS are the [Research Funding Lookup *] and [* Custom Value] tables. See the table descriptions for details.

7.3.6 Deleted columns

The *Dimensions for Universities* data source is retired in Elements 6.2.0, as it has been replaced by the newer by *Dimensions* data source. Accordingly, the following columns have been removed from the [Publication] table:

- `[Dimensions for Universities Citation Count]`
- `[Dimensions for Universities RCR]`

7.3.7 New columns

There are, of course, many new columns in the new `rfs` schema. These are documented under the appropriate tables.

In the dbo schema, there are several new `[* Precision ID]` columns as a result of some `datetime` columns changing to data type `date`. See below for details.

Some tables have a new `[RoleAccess]` column. This is only for internal use and should not be included in the results of any query. Its value should not be altered, as it governs access to potentially sensitive RFS data. Tables that have had this column added are:

- [Category]
- [Data Source]

- [Link]
- [Relationship Type]

The following three columns are also new in 6.2.0. See the relevant table documentation for their descriptions:

- `[Assessment REF2 Output].[Media Of Output]`
- `[Category].[Reporting Table Name]`
- `[Link].[Grants View Access]`

7.3.8 Changes of column type

Several columns that were previously of type `datetime` have been changed to type `date`. This has only been done where the column value truly recorded a date rather than a timestamp, and the time component of the value was therefore always set to 00:00:00. This change ensures that the column type correctly reflects the meaning of the column and guards against errors when comparing dates, for example, errors introduced by timezone differences. While unlikely, it is possible that this change may break any custom reports using the changed columns. You should therefore check that any reports using them still function correctly. The changed columns are:

- `[Assessment List Definition].[Maximum Eligible Date]`
- `[Assessment List Definition].[Minimum Eligible Date]`
- `[Assessment REF1 Researcher].[Date Of Birth]`
- `[Assessment REF1 Researcher Contract].[Contract End Date]`
- `[Assessment REF1 Researcher Contract].[Contract Start Date]`
- `[Assessment REF1 Researcher Contract].[Fixed Term Contract End Date]`
- `[Assessment REF1 Researcher Contract].[Fixed Term Contract Start Date]`
- `[Assessment REF1 Researcher Contract].[Secondment End Date]`
- `[Assessment REF1 Researcher Contract].[Secondment Start Date]`
- `[Assessment REF1 Researcher Contract].[Unpaid Leave End Date]`
- `[Assessment REF1 Researcher Contract].[Unpaid Leave Start Date]`
- `[Impact Evidence].[Date Of Testimonial]`

Each of these `date` has a corresponding, new `[* Precision ID]` column.

7.4 Changes from v6.0.0 to v6.1.0

The [Publication Record] table has two new columns:

- `preprint-for`
- `preprint-for hash`

These support the addition of "Preprint" as a distinct publication type. `preprint-for` is a new underlying metadata field; where the data source has indicated that the publication is a preprint, this field may describe the subsequent publication that it is a preprint of.

7.5 Changes from v5.21.0 to v6.0.0

7.5.1 Deleted column

The `ID` column has been removed from the [Address] table, as it served no purpose. When joining to the a [Address] table, instead use the `[Address Hash]` column.

7.5.2 Changes of column type

All `[Address Hash]` and `[Address Hash]` columns are now of data type `varchar(24)`, whereas they were previously `nvarchar(24)`.

7.5.3 New columns

The [Category] table has a new set of columns supporting the new functionality allowing configurable display names for object categories. These columns show the values selected on the "Configure module display names" system admin page. Note that table and column names in the reporting database will still use the default names, regardless of what is set here.

- `Object Display Name Lowercase Plural`
- `Object Display Name Lowercase Singular`
- `Object Display Name Sentence Case Plural`
- `Object Display Name Sentence Case Singular`

The [Relationship Type] table has new `[From Category ID]` and `[To Category ID]` columns. These provide the integer IDs of the categories on each end of the relationship type. These can be used, for example, to join to the [Category] table to get the correct display name for the category, so that terminology used in reports matches what it used in the Elements interface.

All [{Category}] tables except the [User] table have a new `[Reporting Dates Are Manually Managed]` column. This is in support of the automatic reporting date setting functionality introduced in Elements 5.21.0. A value of 1 in this column indicates that the object's reporting date(s) are being manually managed, i.e. the system will not change them automatically.

All [{Category} Record] tables have a new `[Suspected Deleted At Source]` column. This flag indicates that Elements has evidence that metadata record has been deleted at the data source, for example, because an attempt to retrieve the record metadata from the source resulted in a 404 Not Found HTTP response. As with other columns in the [{Category} Records] tables, the value from the representative record bubbles up to the corresponding [{Category}] table.

The [Publication External User Account Item] table has a new `[Identifier Account Scheme ID]` column. This contains the internal integer ID of the identifier scheme in the `[Identifier Account Scheme]` column.

All [* Identifier] tables contain a new `[Scheme ID]` column. This contains the integer ID of the identifier scheme in the `[Scheme]` column.

7.6 Changes from v5.20.0 to v5.21.0

7.6.1 Deleted table

The [Romeo Colour] table has been removed from the database in response to SHERPA's retirement of the RoMEO colours in 2020.

7.6.2 Deleted columns

Similarly, the `[Sherpa Romeo Colour]` column has also been removed from the [Publication] and [Publication Record] tables. The `[Sherpa Romeo Data]` column remains but, if populated, will now contain JSON data from the version two SHERPA API, rather than the version one XML-formatted data.

7.7 Changes in patch release v5.20.0.2803

Elements patch release v5.20.0.2803 contains some Reporting Database changes.

7.7.1 New table

The new [Assessment Exercise Definition Unit Manager] table details which users have been assigned the Manager role for the various Assessment Exercise Definition Units. See the table description for details.

7.8 Changes in patch release v5.20.0.2724

Elements patch release v5.20.0.2724 contains some Reporting Database changes.

7.8.1 New columns

The [Assessment REF2 Output] table contains a new column:

- `English Abstract Word Count`

See the table description for details.

7.9 Changes in patch release v5.20.0.2685

Elements patch release v5.20.0.2685 contains some Reporting Database changes.

7.9.1 Change in behaviour

To improve performance, the [Assessment Exercise Definition Unit REF2 Output Count Required] table now excludes default units. See the table description for details.

7.9.2 New tables

New [{Category} Manual Join Split History] tables were added to allow inspection of the join and split operations made to objects by users of the system. The instance of this table for the Publication category provides data to the "REF2 Modified Publication Report" stock report for REF Assessment managers at UK institutions. See the table description for details.

7.9.3 New columns

The [Assessment REF2 Output] table contains two new columns:

- `Created When`
- `Language Within Unit Remit`

See the table description for details.

N.B. There are four previous releases of v5.20.0 that do **NOT** contain the above changes:

- 5.20.0.2670
- 5.20.0.2661
- 5.20.0.2641
- 5.20.0.2632

7.10 Changes from v5.19.0 to v5.20.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

No tables or columns are removed from the Reporting Database in version 5.20.0. Some columns have been renamed for clarity, and many columns that previously stored dates as data type `int`

have had their data type changed to `date`.

7.10.1 Breaking changes

7.10.1.1 Change of data type for date metadata

In order to make it easier for reporting and analytics tools to analyse dates in the reporting database, Elements has migrated all columns representing dates using the SQL Server `int` column type (such as the [Reporting Date 1] and [Reporting Date 2] columns of the [Publication] table) to columns of the same name that represent dates using the SQL Server `date` column type.

There is more detail about this change in Changes to dates in the reporting database in v5.20, including the reasoning behind such a wide range change, and examples for writing code that will work with both the new `date` columns and the pre-5.20.0 `int` columns.

7.10.1.2 Renamed columns

As part of the changes to the representation of dates across the reporting database, the primary key of the [Date] table has changed from being an `int` column called `ID` to a `date` column called `Date`. As with other date representations, the former integer representation has been replaced with the equivalent date value, e.g. the integer `20200518` is replaced with the date `'2020-05-18'`.

In the [Assessment Exercise Definition Unit REF2 Output Count Required] table view, a number of columns have been renamed to better express their purpose:

- `Number Of REF1 Researchers With Zero Attributions Expected` is renamed `Number Of Included REF1 Researchers With Zero Attributions Expected`
- `Required Number Of REF2 Research Outputs (raw calculation)` is renamed `Initial Calculated Number Of Required REF2 Research Outputs`
- `Required Number Of REF2 Research Outputs (rounded)` is renamed `Initial Calculated Number Of Required REF2 Research Outputs (rounded)`
- `Submitted Category A FTE` is renamed `Submitted Category A FTE Of Included REF1 Researchers`

7.10.2 New tables

- Assessment Exercise Definition REF Output Submission Status
- Assessment Exercise Definition Unit Excluded Score Override
- Embeddable Media Type
- HERDC Nomination Checklist Item
- HERDC Return Nomination Checklist Item
- User Record Embeddable Media

See the table descriptions for details.

7.10.3 New columns

The Assessment Exercise Definition table has a new `REF2 Open Access Manager Role Enabled` column, indicating whether the REF2 Open Access Manager Role is enabled for the exercise.

The Assessment REF1 Researcher table has three new columns:

- `Default REF1 Contribution Research Group ID`
- `Initials`
- `Surname`

The Assessment REF2 Output table has 26 new columns:

- `Additional Information Word Count`
- `Calculated Additional Coauthors Count`
- `Calculated REF2 Output Type ID`
- `Double-weighting Statement Word Count`
- `Inferred Additional Coauthors Count`
- `Is Attributable`
- `Is English Language Output`
- `Output Format Default Value`
- `Output Format Override`
- `REF Mapped Article Number`
- `REF Mapped DOI`
- `REF Mapped First Page`
- `REF Mapped ISBN`
- `REF Mapped ISSN`
- `REF Mapped Issue`
- `REF Mapped Patent Number`
- `REF Mapped Place`
- `REF Mapped Publication Date`
- `REF Mapped Publication Date Precision ID`
- `REF Mapped Publisher`
- `REF Mapped Title`
- `REF Mapped Url`
- `REF Mapped Volume`
- `REF Mapped Volume Title`
- `REF Output Submission Status ID`
- `Submission Status Notes`

The Assessment REF2 Output REF1 Contribution table has a new `Contribution Statement Word Count` column, giving the word count of the 'Author contribution' statement.

The Assessment Exercise Definition Unit table has a new `REF Edit Rights Restricted` column, indicating whether the Unit of Assessment has been locked for editing by Unit Managers.

See the table descriptions for details.

7.10.4 Other changes of data type

In the [Assessment Exercise Definition Unit REF Research Group] table, the `Name` has been extended from `nvarchar(64)` to `nvarchar(128)` to allow for longer Research Group names.

7.11 Changes from v5.18.0 to v5.19.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

No tables or columns are removed from the Reporting Database in version 5.19.0.

7.11.1 Breaking changes

The [Publication OA Policy Exclusion] table introduced in version 5.15.0 had a mis-named `Value` column which references `[OA Policy].ID`. This has been renamed `OA Policy ID` to follow the convention elsewhere in the database. The `Policy ID` column of the [Publication OA Policy] table has also been renamed `OA Policy ID` to match. See Changes from v5.14.1 to v5.15.0 notes for details and examples.

7.11.2 New tables

There are nine new tables. The new [Publication External User Account Item] table reports details of publications that have been synchronised to an external user account such as a user's ORCID profile.

The remaining eight are all specific to UK institutions using the Assessment module for REF2021 submissions:

- Assessment Exercise Definition REF Default Output Type Mapping
- Assessment Exercise Definition Unit REF Research Group
- Assessment Exercise Definition Unit REF2 Output Count Required
- Assessment REF1 Researcher
- Assessment REF1 Researcher Contract
- Assessment REF1 Researcher Contract No Research Connection Reason
- Assessment REF1 Researcher Contract Research Group
- Assessment REF2 Output Type

See the table descriptions for details.

7.11.3 New columns

All [{Category}] and [{Category} Record] tables have a new `{Category} Source ID` column, containing an integer ID referencing the `ID` column of the appropriate [{Category} Source] table. This is more stable than referencing via the Source Display Name, which may change over time, particularly for RT2 and custom sources. In the case of the [{Category}] tables, this refers to the data source of the representative record for the publication.

The [Publication] table has a new `oapolicyexclusion hash` column. This can be useful for downstream systems to detect when a publication's OA policy exclusions have changed by querying only the [Publication] table. Any change in the publication's OA policy exclusions will result in a change in `oapolicyexclusion hash`, which can be used to trigger further action.

The [Publication OA Policy] table has three new columns:

- `Compliance Status Is Overridden`
- `Compliance Status Override Reason`
- `Compliance Status Without Override`

See the table description for details.

The [User] table has a new `Is Student` column. This indicates whether or not the user is a student as set via the HR feed or manual user record.

The [User Identifier] table has a new `Is Connection Write Capable` column. For user identifiers such as ORCID that can be used to connect to an external account, this indicates whether the connection (if any) has permission to write to that account.

The [Group User Membership] table has a new `Is Primary` column, which indicates whether the membership was created using the User's Primary Group Descriptor.

7.11.3.1 New columns specific to the REF2021 Assessment Exercise for UK institutions.

The [Assessment Exercise Definition] table has a new `REF1 Researcher Edit Rights Restricted` which indicates whether all REF1 Researcher data in the exercise definition is read-only for particular roles.

The [Assessment Exercise Definition Unit] table has six new columns:

- `REF Notes On Number Of Required REF2 Outputs`
- `REF1 Researchers Allowed Allocations To Multiple Research Groups`
- `REF1 Researchers Category A FTE Override`
- `REF2 Output Subprofile Categories Enabled`
- `REF2 Outputs Assignable To Research Groups`

- `REF6b Approved Reduction In Outputs`

See the table description for details.

The [Assessment REF2 Output] table has seven new columns:

- `Attribution Count`
- `Contribution to Each Attributed REF1s Attribution Count`
- `Output Allocation 1`
- `Output Allocation 2`
- `Output Allocation 3`
- `Potential Final Attribution Count`
- `Potential Final Contribution to an Affiliated REF1s Attribution Count`

See the table description for details.

The [Assessment REF2 Output REF1 Contribution] table has a new `Research Group ID` column associating a REF1 Contribution to a Research Group.

7.12 Changes from v5.17.0 to v5.18.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

No tables or columns are removed from the Reporting Database in version 5.18.0 (although see the note below about [Duplicate {Category} Suggestion] tables). There are a small number of new columns and some changes to the length of `nvarchar` columns containing identifier scheme names.

[Duplicate {Category} Suggestion] tables are no longer populated automatically

To improve system performance, the job that populates the [Duplicate {Category} Suggestion] tables is no longer run on an automatic schedule. Therefore, these tables will usually be empty, or may contain out-of-date data. If you have processes that depend on these tables please contact Symplectic to discuss how to generate the duplicate suggestions.

7.12.1 New columns

The [Assessment REF2 Output] table contains four new columns:

- `Factual Information About Significance Of The Output`
- `Includes Significant Material Published Prior To 2014`
- `Information About Research Process Or Content`
- `Output Type Override`

See the table description for details.

The [HERDC Return] table contains a new `bit` column `Show Nomination Checklist`, which indicates whether or not the Annual Collection (HERDC) Return has the Nomination Checklist functionality enabled.

The [Publication Record] table contains two new columns:

- `formatted-abstract`
- `formatted-title`

These may contain versions of the abstract and title using simple markup (e.g. using a simple subset of HTML), which can then be rendered in the user interface or downstream systems.

Both columns are also surfaced in the [Publication], where they contain the data from the representative record (if any). If these fields are used on any publication types, they will also appear under their display names in the [Publication Record (Field Display Names)] and

[Publication (Field Display Names)].

7.12.2 Changes of column type

The `Name` column of the [Identifier Scheme] table and the `Scheme` column of the [* Identifier] tables have been standardised to `nvarchar(50)`. Previously, these were `nvarchar(100)` and `nvarchar(20)` respectively, which caused truncation of identifier scheme names over 20 characters long.

7.13 Changes from v5.16.0 to v5.17.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

No tables or columns are removed from the Reporting Database in version 5.17.0. The majority of additions are related to functionality specific to the REF2021 Assessment Exercise for UK institutions, with a few general improvements around publication dates, author counts and user identifiers.

7.13.1 New tables

- Assessment REF2 Output Affiliated REF1 User
- Publication REF OA Policy
- Assessment REF2 Output REF1 Contribution
- Assessment Exercise Definition User

See the table descriptions for details of these new tables.

7.13.2 New columns

The [Publication] table has six new columns:

- `Author Count`: provides a count of the total number of authors.
- `Canonical Acceptance Date`: The date of acceptance as displayed in the OA Monitor. The first non-null Acceptance Date from the publication's records in default precedence order. Null if there are none.
- `Canonical Acceptance Date Precision ID`
- `Combined Publication Date`: The date of publication as displayed in the OA Monitor. The first non-null Publication Date from the publication's records in default precedence order. Null if there are none.
- `Combined Publication Date Precision ID`
- `REF Language`: Used to determine a single Language value for publications in a REF context, sourced using the same logic as the UI. The first non-null Language from the publication's records in default precedence order.

The [User Identifier] table and its associated views [Claimed User Identifier], [Pending User Identifier], and [Declined User Identifier] each have four new columns relating to how the decision about the identifier was made:

- `Status Modified When`
- `Status Set By Agent Type ID`
- `Status Set By Agent ID`
- `Status Set By User ID`

See the table descriptions for details.

The [Assessment REF2 Output] table contains 27 new columns:

- `Additional Coauthors Override`
- `Additional Information`

- `Assessment Exercise Definition ID`
- `Confirmation Status`
- `Cross-referral`
- `Double-weighted`
- `Double-weighting Reserve Output ID`
- `Double-weighting Reserve Publication ID`
- `Double-weighting Statement`
- `English Abstract`
- `Is Criminology`
- `Is Forensic`
- `Is Interdisciplinary`
- `Is Pending`
- `Is Reserve`
- `Is Sensitive`
- `Output Subprofile Category`
- `Overall Predicted Score ID`
- `Overall Predicted Score Notes`
- `Pending Reserve Output ID`
- `Pending Reserve Publication ID`
- `Publication Date Override`
- `Publication Date Override Precision ID`
- `REF OA Status Override`
- `REF OA Status Override Notes`
- `Second Attribution User ID`
- `Supplementary Information`

See the See the table description for details.

7.13.3 Changes of column type

In the [User Identifier] table and the [Claimed User Identifier] and [Declined User Identifier] views, the columns `Should Auto-claim`, `Should Auto-suggest`, `Should Auto-reject`, and `Should Ignore` have been changed data type from `int` to `bit`. The values loaded into these columns are still either 0 or 1, so no queries should need to be changed as a result.

7.14 Changes from v5.15.0 to v5.16.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

7.14.1 Views in the Reporting Database

Version 5.16.0 sees the introduction of views to the Reporting Database. These gives data consumers the option to create more complex queries using larger tables that contain data across all categories of object (e.g. the new [Link] table), whilst maintaining backward-compatibility and ease of use by replicating category-specific tables in views (e.g. [Publication User Relationship]). This also reduces the physical size of the database and the server load involved in synchronising the Reporting Database.

7.14.2 Breaking changes

The [User Identifier Association] table has been removed. It is replaced and extended by the new [User Identifier] table and its associated views. Queries using the [User Identifier Association] table will need to be rewritten to use the new table and/or its associated views. See the notes below and the table description for more details.

7.14.3 Deleted tables

- Deposit Advice Deposit Advice Relationship
- Funding Body Funding Body Relationship
- Journal Journal Relationship

Since no link types exist for relationships that might populate these three Relationship tables, they were always empty. They have therefore been removed.

- User Identifier Association

This table has been replaced with the [User Identifier] table and its associated views. See the notes below and the table description for more details.

7.14.4 New tables and views

- Agent Type
- API Account
- Data Source
- Link
- Pending Grant
- Declined Grant
- User Identifier
- Claimed User Identifier
- Pending User Identifier
- Declined User Identifier

The new [Agent Type] table lists the different types of agent that can create links in Elements, e.g. user search, offline search, users, the API, etc.

The new [API Account] table lists the accounts registered for access to the Elements API.

The new [Data Source] table lists the data sources for *all* categories in a single table. The various [{Category} Source] tables are replaced with views of the new table. SELECT statements based on these views will function in exactly the same way as before; your queries should not need any modification.

The new [Link] table lists *all* links between *all* categories in a single table. This includes claimed, pending and declined links, for link types where approval status is applicable. The various [{Category} {Category} Relationship] tables are replaced with views on this table, as are the [Pending Publication] and [Declined Publication] tables. SELECT statements based on these views will function in exactly the same way as before; your queries should not need any modification.

With the introduction of Grant claiming in 5.15.0 it is necessary to report on the approval status of Grant-User links. The new [Pending Grant] and [Declined Grant] views provide this ability. Their function is analogous to that of [Pending Publication] and [Declined Publication] views for User-Publication links.

The new [User Identifier] table replaces the [User Identifier Association] table and significantly extends its functionality. Whereas the old table contained only claimed user identifiers (i.e. those set to auto-claim or auto-suggest), the new table contains *all* identifiers in the system, whether claimed, pending or declined (i.e. set to ignore or auto-reject). For ORCID identifiers, it is also possible to determine whether a connection to the corresponding ORCID account has been made and is currently active. Possible new uses include calculating the percentage of users who have an active Elements to ORCID connection, or reporting on identifiers that have been suggested but not acted upon by the user. The three views [Claimed User Identifier], [Pending User Identifier] and [Declined User Identifier] provide cut-down versions of this table containing only user identifiers with the corresponding approval status.

7.14.5 Other changes

Several column types have had their maximum length increased to prevent truncation of data:

- `Full Address` columns have had their maximum length increased from 500 characters to

1000 characters.

- `Organisation` columns in [* Address] tables have had their maximum length increased from 100 characters to 500 characters.
- Columns containing URLs have had their maximum length increased from either 200 or 400 characters to 500 characters.

7.15 Changes from v5.14.1 to v5.15.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Consumers of the [Publication OA Policy] table should be aware of **breaking changes** to this table in version 5.15.0.

Up to and including Elements version 5.14.1, the `ID` column of this table was used to reference the ID column of the [OA Policy] table. In version 5.15.0, the [Publication OA Policy] table has gained child tables, meaning that its `ID` column is now an integer identifier used by its child tables to identify rows in this table. `[OA Policy].ID` is now referenced by the `Policy ID` column. Furthermore, in a future version of Elements, `Policy ID` will be renamed `OA Policy ID`, to bring it into line with conventions used elsewhere in the database.

In addition to changes above, the new [Publication OA Policy Exclusion] table has a mis-named `Value` column which also references `[OA Policy].ID`. This will also be renamed `OA Policy ID` in a future version of Elements. **UPDATE:** These changes have now been implemented in version 5.19.0.

The following examples illustrate how queries should be altered for the different versions. Affected column names are highlighted in **bold**.

```
-- Version 5.14.1 and below
SELECT  *
FROM    [OA Policy] plcy
        JOIN [Publication OA Policy] poap
            ON  plcy.[ID] = poap.[ID]
;

-- Versions 5.15.0 to 5.18.0 inclusive
SELECT  *
FROM    [OA Policy] plcy
        JOIN [Publication OA Policy] poap
            ON  plcy.[ID] = poap.[Policy ID]
        -- table introduced in 5.15.0
        JOIN [Publication OA Policy Exclusion] excl
            ON  poap.[Publication ID] = excl.[Publication ID]
                AND poap.[Policy ID] = excl.[Value]
;

-- Version 5.19.0 and above
SELECT  *
FROM    [OA Policy] plcy
        JOIN [Publication OA Policy] poap
            ON  plcy.[ID] = poap.[OA Policy ID]
        -- table introduced in 5.15.0
        JOIN  [Publication OA Policy Exclusion] excl
            ON  poap.[Publication ID] = excl.[Publication ID]
                AND poap.[Policy ID] = excl.[OA Policy ID]
;
```

7.15.1 New tables:

- Elements 5.15.0 adds the ability to 'tag' Assesment Exercise Definitions. The Assessment Exercise Definition Tag table reports on these tags.
- Assessment REF2 Output is added specifically to aid UK institutions preparing for their REF2021 submissions.
- HERDC Nomination Evidence File reports on Evidence Files attached to a HERDC nomination (applicable only to Australian institutions).
- Repository Item File reports on the files deposited to an institutional repository via a Repository Tools 1 (RT1) connection.
- Publication OA Policy Non-Compliance Reason reports the reason that the Open Access Monitor has calculated a publication as being non-compliant with an OA Policy for which it is eligible.
- Publication OA Policy Exclusion reports publications that have been excluded from an OA Policy or Policies.

7.16 Changes from v5.14.0 to v5.14.1

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Version 5.14.1 adds a new `Created When` column to [{Category} Record] tables, giving the creation date and time of each individual record. The following example query uses `Created When` to find the earliest data source for each publication:

```
SELECT   p.ID
         ,x.[Data Source] "Earliest Record Data Source"
         ,x.[Created When] "Earliest Record Created When"
FROM     [Publication] p
         CROSS APPLY (
           SELECT  TOP(1)
                   [Data Source]
                   ,[Created When]
           FROM  [Publication Record]
           WHERE [Publication ID] = p.ID
           ORDER BY [Created When]
         ) x
;
```

Note that the `Created When` value for an object's representative record is also surfaced in the corresponding [{Category}] table. Care should be taken not to confuse it with the object's `Date Created in Elements`, which is also a column in the [{Category}] table.

7.17 Changes from v5.13.0 to v5.14.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

In the User table, the columns `Is Public` and `Institutional Email Is Public` have been removed and replaced with the new columns, `Privacy Level` and `Institutional Email Privacy Level` respectively. This brings user privacy reporting into line with other objects and fields, and allows access to multi-level privacy options such as Public/Internal/Private. Queries accessing user data should be rewritten to use these new privacy columns. For more details and examples see Privacy and Data Protection in the Reporting Database and [User] table.

Elements 5.14.0 introduces three new fields to publication records:

- `altmetric-attention-score`

- `associated-identifiers`
- `field-citation-ratio`

Corresponding columns have been added to the Publication and Publication Record tables, as well as an `associated-identifiers hash` column to aid easy change detection.

The HR Log table has three new columns to report on HR feed issues caused by clashing or invalid User Public URL Path fragments:

- `Duplicate Public URL Path Fragment Count`
- `Invalid Public URL Path Fragment Count`
- `Locally Covered Public URL Path Fragment Count`

Fixes:

- Locking or unlocking a manual record will now trigger an update of the `Is Locked` column in the [{Category}] tables as well as the [{Category} Record] tables.
- In [* Field Setting Override] tables, the data type of the `Hidden` column has been corrected from `int` to `bit`. The value of this column will still be either 1 or 0, so queries are unlikely to need rewriting.
- In [* Unit] tables, the data type of the `Subdescription` column has been corrected from `nvarchar(20)` to `nvarchar(100)`. This avoids possible truncation of data.
- In [* Unit] tables, the `IsDefaultUnit` column has been renamed `Is Default Unit`, in line with the style of other Reporting Database columns. Queries using this column will need to be modified accordingly.

7.18 Changes from v5.12.0 to v5.13.0

Elements 5.13.0 adds the ability to override various aspects of Assessment Exercises using **Units**. This is reflected in the Reporting Database with the introduction of several new tables to report on the membership of Units and the overridden settings:

- Assessment Exercise Definition Unit
- Assessment Exercise Definition Unit Membership
- Assessment Exercise Definition Unit Override
- Assessment Exercise Definition Field Setting Override
- Assessment Item Definition Unit Override
- Assessment List Definition Unit Override

See the version 5.13.0 release notes for more information on Units.

It is now possible to report on the lock status of a Manual record using the new `Is Locked` column in the [{Category}] and [{Category} Record] tables. Note that where the Manual record is not the representative record for the object, this data will not be loaded into the [{Category}] table and will exist only in the [{Category}] Record table.

All [{Category}] tables have a new `Date Created In Elements` column, showing the date and time that each Elements object was created.

In the Assessment Exercise/Item/List Definition tables, a new `Reviewer Guidance Default Value` column shows the guidance text displayed to Assessment Reviewers, where this has not been overridden by a Unit. A similar `Researcher Guidance Default Value` column in the Assessment Exercise/List Definition tables shows the default guidance displayed to researchers when completing their assessments.

7.19 Changes from v5.11.0 to v5.12.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes

The columns `OA Policy Exception Comment` and `OA Policy Exception Type` in the

[Publication] table have been replaced with a new Publication OA Policy Exception table. This is part of the change to allow multiple OA policy exceptions on a single publication. The new `oapolicyexception hash` column has been added to the [Publication] table to enable downstream systems to detect when a publication's OA policy exceptions have changed by querying only the [Publication] table. Any change in the publication's OA policy exceptions will result in a change in `oapolicyexception hash`, which can be used to trigger further action.

New [* Role] tables have been added to allow reporting on the new 'Role' subfield within Person data.

New columns have been added to the [User] table. Elements 5.12.0 introduces the ability for a user to specify their own preferred form of their name. The columns `User Preferred First Name` and `User Preferred Last Name` expose this in the Reporting Database. In addition, four new `Computed Name…` columns present the user's name in four convenient forms: Abbreviated, Addressee, Alphabetical and Full.

7.20 Changes from v5.10.1 to v5.11

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes

Two new columns were added in the [Assessment Exercise Definition] table, `Active` and `Archived`, to reflect the status of the Exercise Definition.

7.21 Changes from v5.10.0 to v5.10.1

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes

The maximum permitted length for an exercise definition title in the Assessment Module has been increased to 100 characters. The column `Name` in [Assessment Exercise Definition] was changed from type `nvarchar(50)` to `nvarchar(100)` accordingly.

A new "Public URL path fragment" field was added to the HR feed, to be used to construct a URL for the user profile on a public facing researcher profile, such as in the Discovery module. To reflect this in the Reporting Database, a new column `Public URL Path Fragment` was added in the [User] table.

The column `InstitutionalEmailIsPublic` in the [User] table was renamed to `Institutional Email Is Public`; to follow the naming convention used elsewhere in the database.

7.22 Changes from v5.9.0 to v5.10.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes

New `Privacy Level` columns across the database record the privacy settings made by the owning user of various data values. You **must** respect these settings when exposing data from the Reporting Database in reports and to downstream systems.

A new [Assessment Exercise Definition Role Assignment] table contains details of the roles to which users and/or groups have been assigned in Assessment Exercise Definitions. Each row refers to an assignment of either a user or group, so exactly one of `User ID` and `Group ID` will be non-NULL.

7.23 Changes from v5.8.0 to v5.9.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes

Elements version 5.9 adds new `research-interests` and `teaching-summary` fields to the [User Record] table. These hold summary text that users may have entered for these fields on their user profile.

7.24 Changes from v5.7.0 to v5.8.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes

OA Location data from all sources is now available in the [Publication] and [Publication Record] tables, in the new `oa-location-url` and `oa-location-file-version` fields. Existing OA Location columns in the [Publication] table that hold data only from RT1 repository connections have been renamed with an "RT1" to prefix to make the distinction clear. If you have downstream systems that reference these columns, you will need to amend their queries to reflect these changes.

A new Claimed column in the [User] table indicates whether a user has ever logged into Elements to 'claim' their account.

A new Email Sent Log table provides information about emails sent by Elements' automatic emailer. These include notifications and reminders to users, as well as mailgroup emails and error reports.

7.25 Changes from v5.6.0 to 5.7.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio' Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

GRID (Global Research Identifier Database) address information has moved from each individual row in [* Address] child tables to a dedicated [Address] table. This reduces a large amount of data duplication. See the notes for the tables for details.

[* File] child tables have a new `File URL Accessibility` column that can indicate whether a linked file is public, private, or if its availability is unknown.

The [Publication OA Policy] table has a new column indicating the each publication's compliance status.

New [* Reviewer Status], [* Score] and [* Scoreset] child tables provide more detailed data about Assesment Exercise progress and scoring.

7.26 Changes from v5.5.0 to v5.6.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Additional Assessment tables have been added to cover new features introduced in versions 5.6 and 5.5.

7.27 Changes from v5.4.0 to v5.5.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Between version 5.4.0 and 5.5.0, we added new functionality that expanded Elements' use of author identifiers. The new [Identifier Scheme] and [User Identifier Association] tables give access to this data via Reporting Tools, as well as allowing for possible future expansion of similar functionality in other categories. There have also been changes to the [User Search Term Overrides] table as a result of these changes.

Version 5.5.0 added three related capabilities to the Assessment Module - the ability to define a series of *stages* though which an exercise response can progress, including their own reviewers and review settings as well as contents lock values. The version also introduced a Manager role for assessment exercise definitions. The changes to the Reporting Database support additional fields to show current lock status, current stage and status within that stage.

Version 5.5.0 also sees the integration of GRID (Global Research Identifier Database) information into address data within *Elements*. This data is accessible via Reporting Tools, using new columns for GRID data in [* Address], [* Academic Appointment], [* Certification], [* Degree], [* Non-Academic Employment] and [* Postgraduate Training] tables.

7.28 Changes from v5.3.0 to v5.4.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Between version 5.3.0 and 5.4.0 we added support for Relative Citation Ratio from the Dimensions for Universities source, and added Open Access Policy data to the reporting database. We have introduced a new [OA Policy] Table to identify OA Policies configured within Elements and their settings. The OA Policy ID can be used in conjunction with the [Group] table to identify which OA Policy relates to a group.

7.29 Changes from v5.2.0 to v5.3.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Between version 5.2.0 and 5.3.0, a new category of Elements objects has been introduced for Deposit Advice. The previous source-specific Journal tables have been deprecated, in favour of the [Journal Record] table as introduced in version 5.2.0. A number of additions were made to the [Publication], [Publication Record] and [Publication Record File] tables to add `Library Status` field information to the reporting database and to support Repository Tools 2 deposit into DSpace, to complement the addition of DSpace as a data source introduced prior to version 5.1.1.

7.30 Changes from v5.1.1 to v5.2.0

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Between version 5.1.1 and 5.2.0, a new category of Elements objects has been introduced for Journals, and the previous source-specific Journal tables have been deprecated. Tables for assessment attachments were added, along with other smaller improvements to assessment reporting tables. And finally, a number of redundant [{Category} {Category} Relationship] tables for pairings which are not supported have been removed.

7.31 Changes from v5.0 to v5.1.1

As always, we recommended you use a quick database structure comparison tool such as DBComparer or Visual Studio 2013's Database Schema Comparison to examine the full set of changes yourself during your upgrade procedures, should you be in any doubt about the structural changes.

Between version 5.0 and 5.1.1, additional last-modified fields have been added to support reporting synchronisation, additional fields have been added to store more information about files associated with records from repository data sources such as DSpace or Bepress, and a table has added for Waiver Requests.

8 Frequently Asked Questions

8.1 What are the "(Field Display Names)" tables?

This is best described by example.

Elements stores publication data in underlying fields shared amongst all publications.

One example is the "journal" field. For publications of type "Journal Article", the "journal" field holds the name of the journal in which the article appears, and is displayed in the Elements user interface as "Journal". For publications of type "Conference Proceeding" however, the same "journal" underlying field is instead used to hold the name of the set of conference proceedings in which the article appears, and is displayed in the Elements user interface as "Conference Proceedings". The usage of the underlying field is therefore type-dependent.

You may prefer to view tabular data where the columns are named after the type-dependent field usages. In this case, use the [Publication (Field Display Names)] and [Publication Record (Field Display Names)] tables. In these tables, you will see two separate columns called `Journal` and `Conference Proceedings`.

Or you may prefer to view tabular data where the columns are named after the underlying fields. In this case, use the [Publication] and [Publication Record] tables. In these tables, you will see a single `journal` column.

Underlying field names are always lowercase-hyphenated. Type dependent field usage display names are typically capitalised.

Beware that your system administrator has the freedom to rename field usage display names. Therefore, any SQL scripts you write against the [Publication (Field Display Names)] or [Publication Record (Field Display Names)] tables may break if your system administrator alters the display names of fields. The system administrator cannot however alter the names of underlying fields. Therefore any SQL scripts written against the [Publication] and [Publication Record] tables are less likely to require fixes if your system administrator alters any field configuration settings in Elements.

8.2 Why can I not see the (*Web of Science*/*Scopus*/*PubMed*) data for my publication? I know it exists in the main database.

You are most probably looking at the publication only in the [Publication] table. Please look at the [Publication Record] table, where you will find data from all of the data sources. The introduction section in this document describes the reasoning behind having these two tables.

8.3 Which is the "preferred" record for a publication?

You are likely referring to an individual user's ability to set a "preferred record" for a given publication. However, publications by themselves do not have a notion of "preferred record". For any given publication, this concept is an independent preference of each and every user related to the publication. If it is appropriate to use an individual user's preference in your query (for example when pulling data to their CV or individual profile), look in the [User Publication Preferences] table. If no relevant row or record preference value can be found, then the user has not selected a preferred record, and you are advised to fall back to the record of highest reporting precedence.

8.4 Why is the preferred record not used in the [Publication] table?

Which user's preferred record? Because each related user can nominate a different preferred record for the same publication, it doesn't make sense to talk about *the* preferred record for a given publication. Instead, there is a system-wide reporting precedence order which can be adjusted by a system administrator. The record which ranks highest in this order (the "representative record") is placed in the [Publication] table.

8.5 Why are different representative records chosen in the user interface and the reporting database?

The UI and the Reporting Database each have their own, independent data source precedence orders. Both can be set by a system administrator on the Data Source Management page of Elements. In the "Data source precedence" section of this page, there is a dropdown to switch between editing one of three lists:

- **Default** - used by the UI and the API
- **Reporting Tools** - used by the Reporting Database and therefore any reports or systems which consume its data
- **Annual Collection** - used by the Annual Collection when it is licenced (publications only)

While having separate lists does add some administrative overhead, it allows an extra degree of flexibility that is required by some institutions.

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