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Metadata Administrator Manual

**“Framework contract for the provision of forest data and services in
support to the European Forest Data Centre”
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1 Introduction

This manual describes the procedure used to maintain the metadata of the EFDAC Platform, it is presented in the form of a series of "How To".

The main job of the administrator of the platform is to configure the metadata database.

In order to facilitate this administration, we use an [OpenOffice](#) SpreadSheet where each tab is a metadata table.

A macro button allows the export of the content of the SpreadSheet into some CSV files. An SQL script is then used to read the metadata from the CSV files and insert it into the database.

	A	B	C	D	E	F
1	data	Export CSV	unit	label	definition	comment
2	COUNTRY_CODE	COUNTRY_CODE	The code of the co	The code of the cou	No Comment	
3	PLOT_CODE	PLOT_CODE				
4	INV_DATE	DATE				
5	SURFACE	M2	The surface			
6	COMMENT	COMMENT				
7	LATITUDE	DEGREE_MINUTE_SECOND	The latitude of a plot			
8	LONGITUDE	DEGREE_MINUTE_SECOND	The longitude of a plot			
9						

2 How to define a new data?

A “data” is a logical information, like a “surface” that can be represented as a csv file value, a database table column or a field in a web interface.

2.1 Describe the data

We add a new line in the “data” tab.

	A	B	C	D	E	F
1	data	Export CSV	unit	label	definition	comment
2	COUNTRY_CODE	COUNTRY_CODE	The code of the country	The code of the country	No Comment	
3	PLOT_CODE	PLOT_CODE				
4	INV_DATE	DATE				
5	SURFACE	M2	The surface			
6	COMMENT	COMMENT				
7	LATITUDE	DEGREE_MINUTE_SECOND	The latitude of a plot			
8	LONGITUDE	DEGREE_MINUTE_SECOND	The longitude of a plot			

2.2 Describe the unit

A data must always have a unit, if the unit of the data doesn't already exist, we need to add it in the “unit” tab.

	A	B	C	D
1	unit	Export CSV	type	label
2	CENTIMETRE	NUMERIC	cm	Centimetre
3	COUNTRY_CODE	CODE	The code of the country.	The code of the country.
4	DATE	DATE	date	Date type.
5	DEGREE_MINUTE_SECOND	COORDINATE	Degree Minute and Second of a coordinate.	The coordinate format is +/DD.MM.SS, The datum used is WGS 84 and no map projection system is used.
6	M2	NUMERIC	m2	Square meter
7	PERCENTAGE	RANGE	%	Percentage.
8	PH	RANGE	pH	pH value.
9	PLOT_CODE	STRING	The code of the plot	The code of the plot (code used by the country)
10	COMMENT	STRING	A comment	

The allowed data types are :

- STRING
- INTEGER
- NUMERIC
- CODE
- RANGE
- DATE
- COORDINATE

2.3 Describe the modes

If the unit is of type “CODE”, we must define the list of authorized modes. This is done by filling the “modes” tab.

	A	B	C	D	E
1	Unit	Export CSV	Position	Label	Definition
2	COUNTRY_CODE	1	1	France	France
3	COUNTRY_CODE	3	3	<u>Netherlands</u>	<u>Netherlands</u>
4	COUNTRY_CODE	5	5	<u>Italy</u>	<u>Italy</u>
5	COUNTRY_CODE	6	6	<u>United Kingdom</u>	<u>United Kingdom</u>
6	COUNTRY_CODE	7	7	<u>Ireland</u>	<u>Ireland</u>
7	COUNTRY_CODE	8	8	<u>Denmark</u>	<u>Denmark</u>
8	COUNTRY_CODE	9	9	<u>Greece</u>	<u>Greece</u>
9	COUNTRY_CODE	11	11	<u>Spain</u>	<u>Spain</u>
10	COUNTRY_CODE	12	12	<u>Luxembourg</u>	<u>Luxembourg</u>
11	COUNTRY_CODE	13	13	<u>Sweden</u>	<u>Sweden</u>
12	COUNTRY_CODE	14	14	<u>Austria</u>	<u>Austria</u>
13	COUNTRY_CODE	15	15	<u>Finland</u>	<u>Finland</u>
14	COUNTRY_CODE	51	51	<u>Hungary</u>	<u>Hungary</u>
15	COUNTRY_CODE	53	53	<u>Poland</u>	<u>Poland</u>
16	COUNTRY_CODE	54	54	<u>Slovak Republic</u>	<u>Slovak Republic</u>
17	COUNTRY_CODE	55	55	<u>Norway</u>	<u>Norway</u>
18	COUNTRY_CODE	56	56	<u>Lithuania</u>	<u>Lithuania</u>
19	COUNTRY_CODE	57	57	<u>Croatia</u>	<u>Croatia</u>
20	COUNTRY_CODE	58	58	<u>Czech Republic</u>	<u>Czech Republic</u>
21	COUNTRY_CODE	59	59	<u>Estonia</u>	<u>Estonia</u>

2.4 Describe the ranges

If the unit is of type “RANGE”, we must define the range of authorized values. This is done by filling the “range” tab.

	A	B	C
1	Unit	Export CSV	Min
2	PERCENTAGE		100
3	PH		14

3 How describe a database format ?

3.1 Describe the table

In order to describe a database table, we edit the content of the “**table_format**” tab.

The “isColumnOriented” value indicate when the data is stored one value per line.

	A	B	C
1	Format	Export CSV	is Column Oriented
2	PLOT_DATA	0	PLOT_DATA
3	TREE_DATA	0	TREE_DATA
4	LOCATION_DATA	0	LOCATION
5	PLOT_VARIABLE	1	PLOT_VARIABLE
6	TREE_VARIABLE	1	TREE_VARIABLE
7	SPECIES_DATA	0	SPECIES_DATA
8			

3.2 Describe the table fields

Then we need to describe each field of the table in the “**table_field**” tab. The “isInserted” flag is used to indicate fields that are expected when inserting the data.

	A	B	C	D	E	F
1	Data	Format	Column Name	isInserted	Comment	
2	SUBMISSION_ID	LOCATION_DATA	SUBMISSION_ID	1		
3	PLOT_CODE	LOCATION_DATA	PLOT_CODE	1	The plot code	
4	CLUSTER_CODE	LOCATION_DATA	CLUSTER_CODE	1	Identifier of a group of plots	
5	COUNTRY_CODE	LOCATION_DATA	COUNTRY_CODE	1		
6	LATITUDE	LOCATION_DATA	LAT	1	The latitude of the plot	
7	LONGITUDE	LOCATION_DATA	LONG	1	The longitude of the plot	
8	IS_PLOT_COORDINATE	LOCATION_DATA	IS_PLOT_COORDINATE	1	Describes if the coordinate is real or if its the center of a grid	
9	COMMENT	LOCATION_DATA	COMMENT	1		
10	GEOM	LOCATION_DATA	THE_GEOM	0	The geographic coordinate, this field is calculated by a trigger	
11	SUBMISSION_ID	PLOT_DATA	SUBMISSION_ID	1		
12	COUNTRY_CODE	PLOT_DATA	COUNTRY_CODE	1		
13	PLOT_CODE	PLOT_DATA	PLOT_CODE	1		
14	CYCLE	PLOT_DATA	CYCLE	1		
15	REF_YEAR_BEGIN	PLOT_DATA	REF_YEAR_BEGIN	1		
16	REF_YEAR_END	PLOT_DATA	REF_YEAR_END	1		
17	INV_DATE	PLOT_DATA	INV_DATE	1		
18	COMMENT	PLOT_DATA	COMMENT	1		
19	SURFACE	PLOT_DATA	SURFACE	1		
20	PH	PLOT_DATA	PH	1		

4 How describe a file format ?

4.1 Describe the file

In order to describe a file format, we must first describe the logical file formats in the “**file_format**” tab.

	A	B
1	Format	File Extension
2	LOCATION_FILE	CSV
3	TEST_PLOT_FILE	CSV
4	TEST_TREE_FILE	CSV
5		

4.2 Describe the file fields

Then, we need to describe the content of the files. For this, we fill the “**file_field**” tab with the name of the expected data (assuming the data is already described, if not see 2).

	A	B	C
1	Data	Format	Position
2	PLOT_CODE	LOCATION_FILE	1
3	CLUSTER_CODE	LOCATION_FILE	2
4	LATITUDE	LOCATION_FILE	3
5	LONGITUDE	LOCATION_FILE	4
6	IS_PLOT_COORDINATE	LOCATION_FILE	5
7	COMMENT	LOCATION_FILE	6
8	PLOT_CODE	TEST_PLOT_FILE	1
9	INV_DATE	TEST_PLOT_FILE	2
10	CYCLE	TEST_PLOT_FILE	3
11	REF_YEAR_BEGIN	TEST_PLOT_FILE	4
12	REF_YEAR_END	TEST_PLOT_FILE	5
13	SURFACE	TEST_PLOT_FILE	6
14	PH	TEST_PLOT_FILE	7
15	COMMENT	TEST_PLOT_FILE	8
16	PLOT_CODE	TEST_TREE_FILE	1
17	CYCLE	TEST_TREE_FILE	2
18	TREE_CODE	TEST_TREE_FILE	3
19	VOLUME	TEST_TREE_FILE	4
20	COMMENT	TEST_TREE_FILE	5

4.3 Describe the mapping with the database

Once the file is described, we should describe the mapping between the file fields and the database.

For this, we fill the “**field_mapping**” tab. We cut/paste the first two columns of the “**file_field**” tab and we describe the destination fields (assuming the columns already exist in database, if not see 3).

	A	B	C	D	E
1	SRC_DATA	SRC_FORMAT	DST_DATA	DST_FORMAT	MAPPING_TYPE
2	PLOT_CODE	LOCATION_FILE	PLOT_CODE	LOCATION_DATA	FILE
3	CLUSTER_CODE	LOCATION_FILE	CLUSTER_CODE	LOCATION_DATA	FILE
4	LATITUDE	LOCATION_FILE	LATITUDE	LOCATION_DATA	FILE
5	LONGITUDE	LOCATION_FILE	LONGITUDE	LOCATION_DATA	FILE
6	IS_PLOT_COORDINATE	LOCATION_FILE	IS_PLOT_COORDINATE	LOCATION_DATA	FILE
7	COMMENT	LOCATION_FILE	COMMENT	LOCATION_DATA	FILE
8	PLOT_CODE	TEST_PLOT_FILE	PLOT_CODE	PLOT_DATA	FILE
9	INV_DATE	TEST_PLOT_FILE	INV_DATE	PLOT_DATA	FILE
10	CYCLE	TEST_PLOT_FILE	CYCLE	PLOT_DATA	FILE
11	REF_YEAR_BEGIN	TEST_PLOT_FILE	REF_YEAR_BEGIN	PLOT_DATA	FILE
12	REF_YEAR_END	TEST_PLOT_FILE	REF_YEAR_END	PLOT_DATA	FILE
13	SURFACE	TEST_PLOT_FILE	SURFACE	PLOT_DATA	FILE
14	PH	TEST_PLOT_FILE	PH	PLOT_DATA	FILE
15	COMMENT	TEST_PLOT_FILE	COMMENT	PLOT_DATA	FILE
16	PLOT_CODE	TEST_TREE_FILE	PLOT_CODE	TREE_DATA	FILE
17	CYCLE	TEST_TREE_FILE	CYCLE	TREE_DATA	FILE
18	TREE_CODE	TEST_TREE_FILE	TREE_CODE	TREE_DATA	FILE
19	VOLUME	TEST_TREE_FILE	VOLUME	TREE_DATA	FILE
20	COMMENT	TEST_TREE_FILE	COMMENT	TREE_DATA	FILE
21	IR_10	TEST_TREE_FILE	FLOAT_VALUE	TREE_VARIABLE	FILE
22	IR_5	TEST_TREE_FILE	FLOAT_VALUE	TREE_VARIABLE	FILE
23	PLOT_CODE	WP3_PLOT_FILE	PLOT_CODE	PLOT_DATA	FILE
24	INV_DATE	WP3_PLOT_FILE	CYCLE	PLOT_DATA	FILE
25	CYCLE	WP3_PLOT_FILE	REF_YEAR_BEGIN	PLOT_DATA	FILE
26	REF_YEAR_BEGIN	WP3_PLOT_FILE	REF_YEAR_END	PLOT_DATA	FILE
27	REF_YEAR_END	WP3_PLOT_FILE	INV_DATE	PLOT_DATA	FILE
28	COMMENT	WP3_PLOT_FILE	COMMENT	PLOT_DATA	FILE
29	PLOT_CODE	WP3_SPECIES_FILE	PLOT_CODE	SPECIES_DATA	FILE
30	CYCLE	WP3_SPECIES_FILE	CYCLE	SPECIES_DATA	FILE
31	SPECIES_CODE	WP3_SPECIES_FILE	SPECIES_CODE	SPECIES_DATA	FILE
32	BASAL_AREA	WP3_SPECIES_FILE	BASAL_AREA	SPECIES_DATA	FILE
33	COMMENT	WP3_SPECIES_FILE	COMMENT	SPECIES_DATA	FILE

5 How describe a web-form format ?

5.1 Describe the form

We first describe the logical form in the “**form_format**” tab.

The label is displayed on the web page as a fieldset legend.

	A	B	C
1	Format	Label	Definition
2	PLOT_FORM	Plot	Plot Data
3	TREE_FORM	Tree	Tree Data
4	SPECIES_FORM	Species	Species Data

5.2 Describe the form fields

Then we describe the fields in the “**form_field**” tab.

	A	B	C	D	E	F
1	Data	Format	isCriteria	isResult	Input_Type	Position
2	COUNTRY_CODE	PLOT_FORM	1	1	MULTIPLE	1
3	PLOT_CODE	PLOT_FORM	1	1	TEXT	2
4	CYCLE	PLOT_FORM	1	1	TEXT	3
5	REF_YEAR_BEGIN	PLOT_FORM	1	1	TEXT	4
6	REF_YEAR_END	PLOT_FORM	1	1	TEXT	5
7	INV_DATE	PLOT_FORM	1	1	DATE	6
8	COMMENT	PLOT_FORM	0	1	TEXT	7
9	SURFACE	PLOT_FORM	0	1	TEXT	8
10	PH	PLOT_FORM	0	1	TEXT	9
11	COUNTRY_CODE	TREE_FORM	0	0	SELECT	1
12	PLOT_CODE	TREE_FORM	0	0	TEXT	2
13	CYCLE	TREE_FORM	0	0	TEXT	3
14	TREE_CODE	TREE_FORM	1	1	TEXT	4
15	COMMENT	TREE_FORM	0	1	TEXT	5
16	VOLUME	TREE_FORM	0	1	TEXT	6
17	IR_5	TREE_FORM	0	1	TEXT	7
18	IR_10	TREE_FORM	0	1	TEXT	8
19	COUNTRY_CODE	SPECIES_FORM	0	0	SELECT	1
20	PLOT_CODE	SPECIES_FORM	0	0	TEXT	2
21	CYCLE	SPECIES_FORM	0	0	TEXT	3
22	SPECIES_CODE	SPECIES_FORM	1	1	SELECT	4
23	BASAL_AREA	SPECIES_FORM	0	1	TEXT	5
24	COMMENT	SPECIES_FORM	0	1	TEXT	6

The “isCriteria” flag indicate that the value can be used as a request criteria.

The “isResult” flag indicate that the value can be used as a request result.

The “Input Type” value defines what input type will be displayed to the used.

The allowed input types are :

- TEXT (a simple input text field)
- SELECT (a combobox with one choice)
- DATE (a date picker)

5.3 Describe the mapping with the database

Once the form is described, we should describe the mapping between the file fields and the database to indicate how are populated the form field.

We fill the “**field_mapping**” tab (same thing as for the file->database mapping but we change the mapping type value). We cut/paste the first two columns of the “**form_field**” tab and we describe the source fields (assuming the columns already exist in database, if not see 3).

1	SRC_DATA	SRC_FORMAT	DST_DATA	DST_FORMAT	MAPPING_TYPE
34	COUNTRY_CODE	PLOT_FORM	COUNTRY_CODE	PLOT_DATA	FORM
35	PLOT_CODE	PLOT_FORM	PLOT_CODE	PLOT_DATA	FORM
36	CYCLE	PLOT_FORM	CYCLE	PLOT_DATA	FORM
37	REF_YEAR_BEGIN	PLOT_FORM	REF_YEAR_BEGIN	PLOT_DATA	FORM
38	REF_YEAR_END	PLOT_FORM	REF_YEAR_END	PLOT_DATA	FORM
39	INV_DATE	PLOT_FORM	INV_DATE	PLOT_DATA	FORM
40	COMMENT	PLOT_FORM	COMMENT	PLOT_DATA	FORM
41	SURFACE	PLOT_FORM	SURFACE	PLOT_DATA	FORM
42	PH	PLOT_FORM	PH	PLOT_DATA	FORM
43	COUNTRY_CODE	TREE_FORM	COUNTRY_CODE	TREE_DATA	FORM
44	PLOT_CODE	TREE_FORM	PLOT_CODE	TREE_DATA	FORM
45	CYCLE	TREE_FORM	CYCLE	TREE_DATA	FORM
46	TREE_CODE	TREE_FORM	TREE_CODE	TREE_DATA	FORM
47	COMMENT	TREE_FORM	COMMENT	TREE_DATA	FORM
48	VOLUME	TREE_FORM	VOLUME	TREE_DATA	FORM
49	IR_10	TREE_FORM	FLOAT_VALUE	TREE_VARIABLE	FORM
50	IR_5	TREE_FORM	FLOAT_VALUE	TREE_VARIABLE	FORM
51	COUNTRY_CODE	SPECIES_FORM	COUNTRY_CODE	SPECIES_DATA	FORM
52	PLOT_CODE	SPECIES_FORM	PLOT_CODE	SPECIES_DATA	FORM
53	CYCLE	SPECIES_FORM	CYCLE	SPECIES_DATA	FORM
54	SPECIES_CODE	SPECIES_FORM	SPECIES_CODE	SPECIES_DATA	FORM
55	BASAL_AREA	SPECIES_FORM	BASAL_AREA	SPECIES_DATA	FORM
56	COMMENT	SPECIES_FORM	COMMENT	SPECIES_DATA	FORM

6 How to create a new dataset?

A dataset is a batch of related data field.

For example, A JRC Request is composed of a set of data files (PLOT and TREE data) with a list of fields that are necessary for the study.

6.1 Define the logical dataset

The first step is to give a logical name to the JRC request. To do this, in the “**dataset**” tab of the metadata spreadsheet, we add a new line (the dataset ID must be unique).

	A	B
1	<u>Dataset ID</u>	<u>Label</u>
2	WP3_REQUEST	Work Package 3 : Basal Area by Species
3	BIODIVERSITY	Biosoil Biodiversity Study
4	LOCATION	Location

6.2 Define the files composing the dataset for data upload

In order to configure the system to allow the upload of files, we must define the link between a dataset and a list of files.

We need to specify the files asked to the user (it can be a single PLOT data file or both a PLOT and a TREE data files). To do this, in the “**dataset_files**” tab of the metadata spreadsheet, we add one line per file format and we specify a logical name to the file formats.

The file type can be either “PLOT_FILE” or “TREE_FILE”, it is used to match the filenames passed to the servlet with the good format.

	A	B
1	<u>Dataset ID</u>	<u>Format</u>
2	WP3_REQUEST	WP3_PLOT_FILE
3	WP3_REQUEST	WP3_SPECIES_FILE
4	BIODIVERSITY	BIODIVERSITY_PLOT_FILE
5	BIODIVERSITY	BIODIVERSITY_TREE_FILE
6	BIODIVERSITY	BIODIVERSITY_GROUND_VEGETATION_FILE
7	BIODIVERSITY	BIODIVERSITY_DEADWOOD_FILE
8	LOCATION	LOCATION_FILE

6.3 Define the form fields composing the dataset for data querying

In order to configure the system to allow the querying of data, we must define the link between a dataset and a list of data fields.

To do this, in the “**dataset_files**” tab of the metadata spreadsheet, we add one line per file format and we specify a logical name to the file formats.

	A	B	C
1	Dataset ID	Format	Field
2	LOCATION	LOCATION_DATA	PLOT_CODE
3	LOCATION	LOCATION_DATA	CLUSTER_CODE
4	LOCATION	LOCATION_DATA	LATITUDE
5	LOCATION	LOCATION_DATA	LONGITUDE
6	LOCATION	LOCATION_DATA	IS_PLOT_COORDINATE
7	LOCATION	LOCATION_DATA	COMMENT
8	WP3_REQUEST	SPECIES_DATA	PLOT_CODE
9	WP3_REQUEST	SPECIES_DATA	CYCLE
10	WP3_REQUEST	SPECIES_DATA	TREE_SPECIES_CODE
11	WP3_REQUEST	SPECIES_DATA	BASAL_AREA
12	WP3_REQUEST	SPECIES_DATA	COMMENT
13	WP3_REQUEST	PLOT_DATA	PLOT_CODE
14	WP3_REQUEST	PLOT_DATA	INV_DATE
15	WP3_REQUEST	PLOT_DATA	CYCLE
16	WP3_REQUEST	PLOT_DATA	REF_YEAR_BEGIN
17	WP3_REQUEST	PLOT_DATA	REF_YEAR_END
18	WP3_REQUEST	PLOT_DATA	COMMENT
19	BIODIVERSITY	DEADWOOD_DATA	PLOT_CODE
20	BIODIVERSITY	DEADWOOD_DATA	CYCLE
21	BIODIVERSITY	DEADWOOD_DATA	DEADWOOD_ID
22	BIODIVERSITY	DEADWOOD_DATA	DW_TYPE_CODE
23	BIODIVERSITY	DEADWOOD_DATA	DW_SPECIES_CODE
24	BIODIVERSITY	DEADWOOD_DATA	DW_MEDIAN_DIAMETER

7 How to define the complementary fields for a given country?

For some countries, we can add some complementary fields.

7.1 Describe the complementary fields

This will be done by adding the following information :

- The description of a new file field.
- The description of a new form field.
- The description of the mapping of these new fields.

The complementary fields, by definition, are always stored in column-oriented database tables, we don't need to describe new columns.

	A	B	C	D	E	F
1	Data	Format	Type	Country_Code	Position	Comment
2	IR_10	TEST_TREE_FILE	FILE	3	6	For Netherland we add IR10
3	IR_10	TREE_FORM	FORM	3	6	For Netherland we add IR10
4	IR_5	TEST_TREE_FILE	FILE	3	7	For Netherland we add IR5
5	IR_5	TREE_FORM	FORM	3	7	For Netherland we add IR5

7.2 Describe the mapping

We also need to describe the mapping.

The logic is the same as for standard field, excepted that the name of the destination table column can be either "FLOAT_VALUE", "INT_VALUE" or "TEXT_VALUE".

The "variable_name" column of the destination table is automatically filled with the name of the variable.

1	SRC_DATA	SRC_FORMAT	DST_DATA	DST_FORMAT	MAPPING_TYPE
19	VOLUME	TEST_TREE_FILE	VOLUME	TREE_DATA	FILE
20	COMMENT	TEST_TREE_FILE	COMMENT	TREE_DATA	FILE
21	IR_10	TEST_TREE_FILE	FLOAT_VALUE	TREE_VARIABLE	FILE
22	IR_5	TEST_TREE_FILE	FLOAT_VALUE	TREE_VARIABLE	FILE
23	PLOT_CODE	WP3_PLOT_FILE	PLOT_CODE	PLOT_DATA	FILE
24	INV_DATE	WP3_PLOT_FILE	CYCLE	PLOT_DATA	FILE

1	SRC_DATA	SRC_FORMAT	DST_DATA	DST_FORMAT	MAPPING_TYPE
47	COMMENT	TREE_FORM	COMMENT	TREE_DATA	FORM
48	VOLUME	TREE_FORM	VOLUME	TREE_DATA	FORM
49	IR_10	TREE_FORM	FLOAT_VALUE	TREE_VARIABLE	FORM
50	IR_5	TREE_FORM	FLOAT_VALUE	TREE_VARIABLE	FORM
51	COUNTRY_CODE	SPECIES_FORM	COUNTRY_CODE	SPECIES_DATA	FORM

8 How to describe the tables hierarchy?

This is needed in order to help the system build SQL requests that are correctly written (to manage the order of the joins between the tables).

We need to describe the relation between the data tables, this is done in the “**table_tree**” tab.

Each table must be linked to one parent table with the foreign key described in the “join key” value.

The table having the symbol “*” as a parent table is the root of the table hierarchy.

	A		B	C	D	E
1	Schema Code	Child Table	Export CSV	Parent Table	Join Key	Comment
2	RAW_DATA	PLOT_DATA		LOCATION_DATA	COUNTRY_CODE, PLOT_CODE	The location submission id is
3	RAW_DATA	TREE_DATA		PLOT_DATA	SUBMISSION_ID, COUNTRY_CODE, PLOT_CODE, CYCLE	The submission id must mat
4	RAW_DATA	LOCATION_DATA		*		
5	RAW_DATA	PLOT_VARIABLE		PLOT_DATA	SUBMISSION_ID, COUNTRY_CODE, PLOT_CODE, CYCLE	The submission id must mat
6	RAW_DATA	TREE_VARIABLE		TREE_DATA	SUBMISSION_ID, COUNTRY_CODE, PLOT_CODE, TREE_CODE, CYCLE	The submission id must mat
7	RAW_DATA	SPECIES_DATA		PLOT_DATA	SUBMISSION_ID, COUNTRY_CODE, PLOT_CODE, CYCLE	The submission id must mat