

Scenario: Parallel input to database and managing of AutoNumber conflicts (v2010-02-11)

The information required to submit to the Commission can come from multiple sources. One approach might be to send around copies of the database to different people and then merge the information returned. Alternatively the information might be requested through excel spreadsheets.

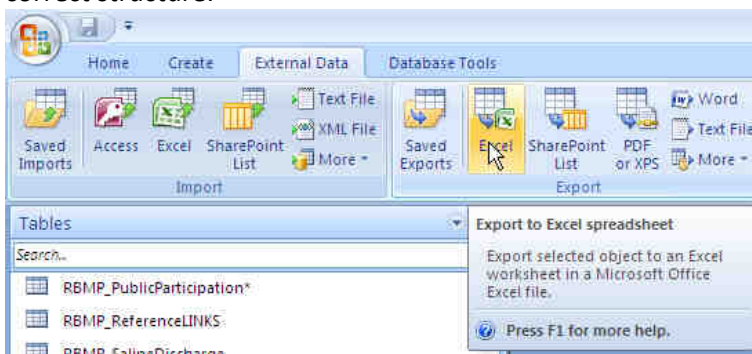
Importing data and appending it to existing tables is standard Microsoft Access functionality. However, a conflict could arise with the so-called 'level 4' tables, the tables whose unique ID needs to be generated internally. If the information is being generated in parallel then it is likely these unique IDs will be duplicated.

The solution to this issue is to assign number ranges to the people requested to provide the information. In order for the import and append of the data to be successful, then the AutoNumber type for these ID fields needs to be turned off first.

The following tutorial should only be undertaken by those familiar with Access and relational databases

1. Example: Surface water body information is going to be requested from teams using excel spreadsheets.

2. The first step is to export the tables from the database to excel spreadsheets ensure that the teams have the correct structure.



3. Do this for all the tables that hold the information which need to be completed. Use the database model diagram to see which tables they should be filling out. The diagrams are available as a pdf under 'Help documents' on the resources page

<http://water.eionet.europa.eu/schemas/dir200060ec/resources/>

4. Certain tables have a field that has 'unique_code' in its name. These fields are the ones needed for internal data management and are required to manage one-to-many relationships for certain schema information. For example, the table SWB_Eco_Exemptions has a field called UniqueCode_ExType. This ID is used in the table SWB_Eco_ExemptionQE to link the multiple QEs back to each exemption. These tables are the parent and child respectively.

5. Identify these unique ID fields in the spreadsheets being sent out and instruct the number ranges that can be used. E.g team 1 starts at 101-200, team 2 starts at 201-300, team 3 starts at 301-400 etc.

6. Team 1 returns this spreadsheet

	A	B	C
1	EUSurfaceWaterBodyCode	UniqueCode_ExType	Exemption_type
2	DERW1111	101	Article4(6) - Accidents
3	DERW2222	102	Article4(6) - Accidents
4	DERW3333	103	Article4(7) - New modification
5	DERW4444	104	Article4(7) - New modification

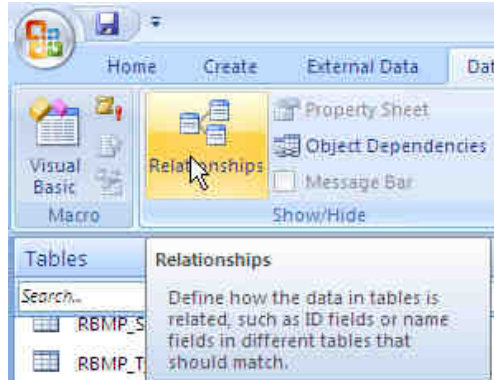
Team 2 returns this spreadsheet:

	A	B	C
1	EUSurfaceWaterBodyCode	UniqueCode_ExType	Exemption_type
2	DECW1100	201	Article4(7) - Sustainable huma
3	DECW1101	202	Article4(7) - Sustainable huma
4	DECW1102	203	Article4(7) - Sustainable huma
5	DECW1103	204	Article4(7) - Sustainable huma

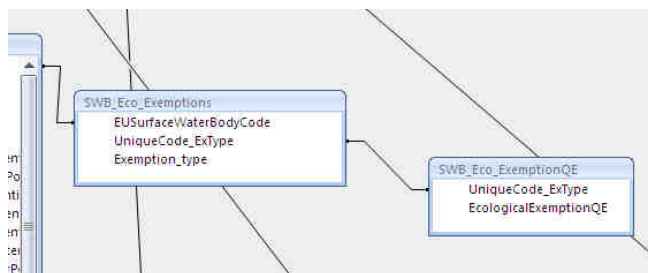
NB: The teams need to manage their own data relationships for example between SWB_Eco_Exemptions and SWB_Eco_ExemptionQE.

7. Before import, the AutoNumber needs to be disabled. This is done in the following steps:

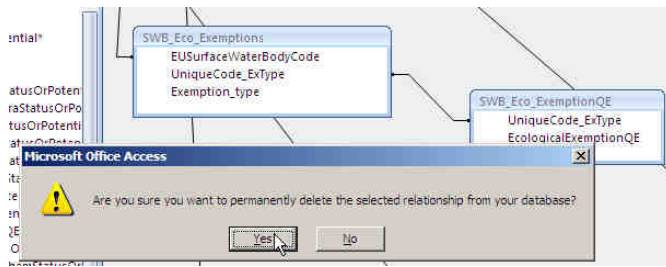
7a. Open the database relationships diagram



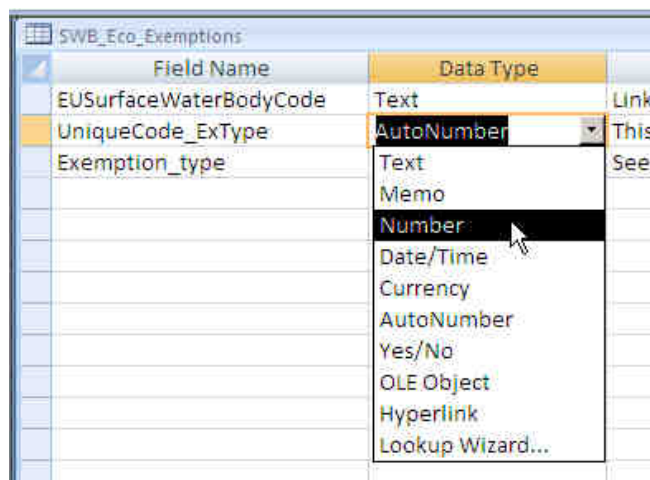
7b. Find the tables (this can be tricky – see the map at the end of the document for approx position of tables grouped by schema).



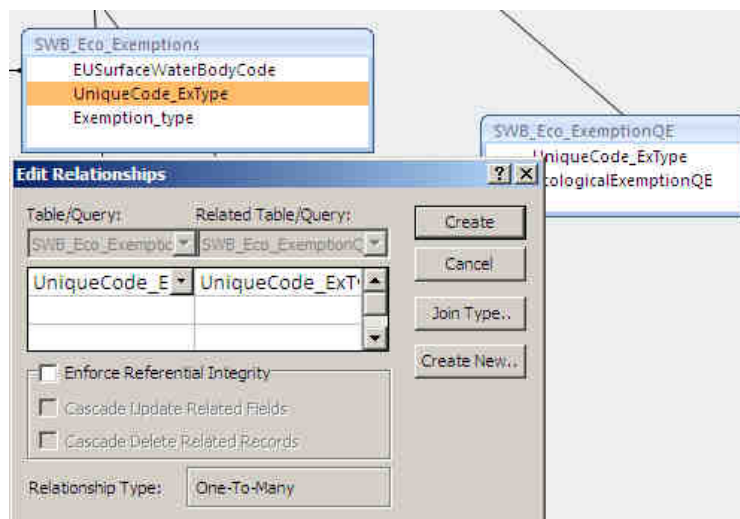
7c. Delete the relationship and save. Do not close the diagram.



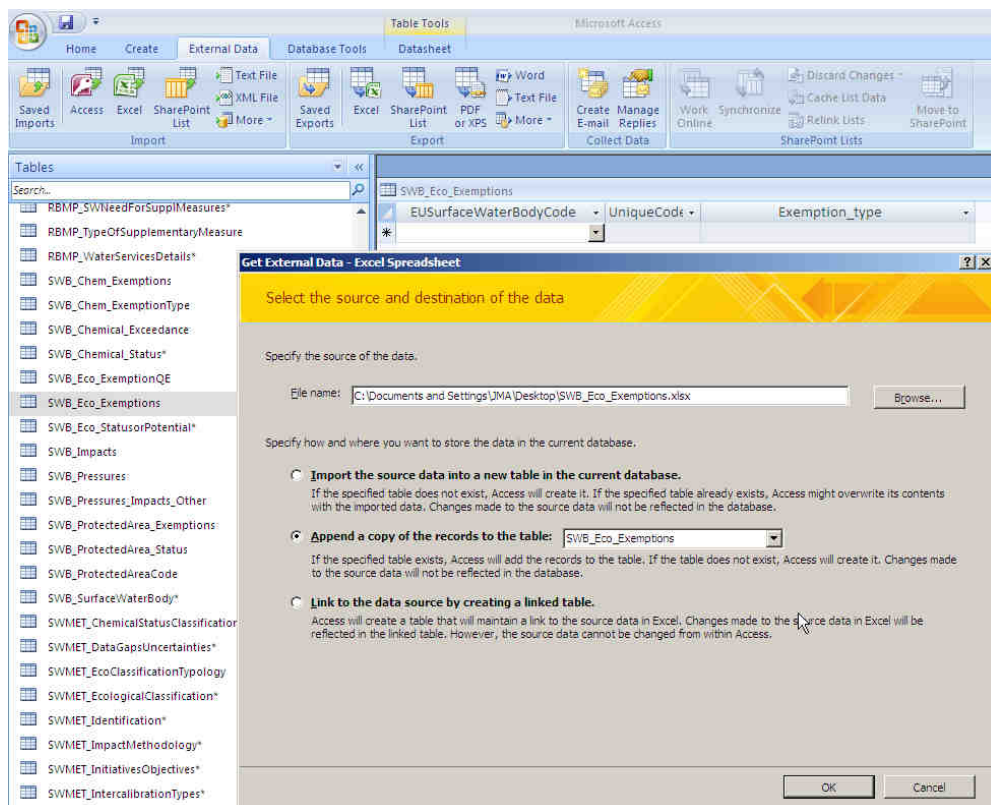
7d. Go to the table with the AutoNumber and update the field type for the UniqueCode field from an AutoNumber to a Number field (Long integer) and then save it



7e. Finally, the relationship needs to be re-established in the database relationships diagram. Go back to the relationships diagram. Click on the parent table 'UniqueCode' field and drag it across and drop it on the UniqueCode field in the child table. In the popup click on 'Create'. Save the diagram.



8. Import and append the data from the spreadsheets



9. Export the data to XML using the conversion tool as normal.

10. In case of problems, contact the helpdesk!

Access WFD Reporting database – database relationships. Approximate position of tables grouped by schema

