

Cloning Column Properties

It is not uncommon for a research project to measure many of the same parameters at different locations, say, or in different contexts. In such cases, the same parameters can end up as data table columns in different tables and even different datasets. It is useful, then, to “clone” column properties from one table to another. ezEML provides such a capability. This is a convenience, but it is also a small step toward metadata standardization.

Suppose, for example, we have created a dataset with a data table called Data_1, and we have entered all of its metadata. Then we upload another data table, Data_2, with most of the same columns. We want to clone a number of column properties from Data_1 to Data_2. Suppose our list of data tables looks like this:

The screenshot shows the ezEML interface. At the top, there is a navigation bar with the ezEML logo and links for EML Documents, Import/Export, EDI Links, User Guide, About, News, and Logout. Below the navigation bar, a welcome message reads "Welcome Back EDI Active EML Document: sample.1.2".

The main content area is titled "Data Tables" and contains a table with the following data:

Data Table Name		Edit	Remove	Re-upload
Data_1	▼	Edit	Remove	Re-upload
Data_2	▲ ▼	Edit	Remove	Re-upload
Nitrogen data	▲	Edit	Remove	Re-upload

Below the table, there are two buttons: "Load Data Table from CSV File" and "Add Data Table from Scratch". A "Save and Continue" button is located below these.

On the left side, there is a "Contents" sidebar with a list of metadata categories: Title, Data Tables, Creators, Contacts, Associated Parties, Metadata Providers, Abstract, Keywords, Intellectual Rights, Geographic Coverage, Temporal Coverage, Taxonomic Coverage, Maintenance, Publisher, Publication Info, Methods, Project, Other Entities, and Data Package ID. At the bottom of the sidebar, there are links for "Check Metadata" and "Submit to EDI".

We’ve already filled out all the metadata for Data_1, and we want to reuse its column properties in table Data_2. In this scenario, we will refer to Data_1 as the **source** data table and Data_2 as the **target** data table.

We click **Edit** next to Data_2, opening a page that contains the following (only part of the page is shown):

Columns:

VEGETATION_TYPE, YEAR_PLACED_IN_FIELD, NTRT, YEAR, PERCENT_LOSS, PLOT_ARM

Edit Column Properties

Clone Column Properties from Another Data Table



Save and Continue

Cancel

We click **Clone Column Properties from Another Data Table**. This brings up a page where we select the EML document containing the source data table:

Clone Column Properties from Another Data Table

Select a data package from which to clone:

Document Name

sample.1.2 (current data package) 

Open for Cloning

Cancel

For this example, we're assuming Data_1 and Data_2 are both in the current data package, which we've selected, but Data_1 is allowed to be in another data package. Click **Open for Cloning**. This opens a page that contains:

Clone Column Properties from Another Data Table

Select a data table from which to clone column properties:

Data_1

Nitrogen data

Select Data Table

Cancel

We need to select which table will be the source table. We select Data_1 and click **Select Data Table**. This brings up a page that contains:

Clone Column Properties ?

From source data table: Data_1

Select the columns whose properties you wish to clone:

- TYPE
- YEAR_PLACED_IN_FIELD
- ARM
- NTRT
- YEAR
- PERCENT_LOSS

Select Columns

Cancel

We need to select the source data table's columns we want to clone. For the purposes of this example, let's suppose we want to clone all but PERCENT_LOSS. We select all of the other columns and click **Select Columns**. This brings up a page that contains:

Clone Column Properties ?

From source data table: Data_1

To target data table: Data_2

Source Column	→ Target Column
TYPE	- select target column -
YEAR_PLACED_IN_FIELD	- select target column -
ARM	- select target column -
NTRT	- select target column -
YEAR	- select target column -

Clone Column Properties

Cancel

For each of the source columns, we need to select the corresponding column in the target data table. Note that the columns don't have to be named identically between the two tables, nor do they need to appear in the same order. We select the target columns, giving something like:

Clone Column Properties ?

From source data table: Data_1

To target data table: Data_2

Source Column	→ Target Column
TYPE	VEGETATION_TYPE
YEAR_PLACED_IN_FIELD	YEAR_PLACED_IN_FIELD
ARM	PLOT_ARM
NTRT	NTRT
YEAR	YEAR

Clone Column Properties

Cancel

We then click **Clone Column Properties** to cause the properties to be cloned. This is potentially a significant change, so you are asked to confirm the action before cloning takes place.

After cloning, the selected columns in the target data table will have the same properties as the corresponding columns in the source data table with two exceptions:

1. The column names are not changed. I.e., the target data table columns keep the names they have in the target data table's CSV file.
2. For Categorical columns, the *codes* in the target data table are not changed, but their *definitions* are filled in by using the definitions for the corresponding codes in the source data table. This way, the lists of codes will match what's in the target data table's CSV file, but the code definitions won't all have to be re-entered for codes that are in common between the two tables.

Note: For tables with many columns, you may prefer to do this cloning a few columns at a time, just so the process feels more manageable. This is fine to do. You can work on a given table a few columns at a time by running through the **Clone Column Properties from Another Data Table** process repeatedly, selecting different columns on each pass until you've completed all the columns you wish to clone.