GISwater

PROTOCOL DOCUMENT		**P-47**
Management of additional fields		

GOALS

Creation, modification and deletion of additional fields in a specific system element or for all elements (cat_feature). This can be useful in case you want to store some data that is not foreseen in the standard Giswater data model. Although the additional fields system does not directly add the fields in the mother tables (node, arc, connec), therefore they cannot be consulted there, if they can be consulted in the QGIS forms and in the 'child' views.

DESCRIPTION

First of all, comment that you need to be an administrator for this process, since those views to which an additional field is added / updated or deleted will be automatically modified.

Two steps are necessary for this process:
- 1: The creation of the field in the database is explained in this protocol.
- 2: The configuration of how it will be displayed in the dialog is perfectly detailed in the P09_config_form_fields protocol.

In this protocol we focus on creating the field, as well as determining its basic configuration. Since the information is stored in two tables that are:

sys_addfields

config_form_fields

And since the view of the element to which an additional field is added will be recreated again, there is specifically a function designed to perform all the tasks of creating an additional field. The call to this function is:

To create a new additional field:

```
SELECT SCHEMA_NAME.gw_fct_admin_manage_addfields($${"client":{"lang":"ES"},
    "feature":{"catFeature":"PUMP"},
    "data":{
            "action":"CREATE",
            "multi_create":"true",
            "parameters":{
                "columnname":"addfield_all",
                "datatype":"string",
                "widgettype":"text",
                "label":"addfield_all",
                "ismandatory":"False",
                "fieldLength":"50",
                "numDecimals":null,
                "active":"True",
                "iseditable":"True"}}}$$);
```
Where:

SCHEMA_NAME is the name of the schema

"catFeature": is the feature to which we want to add a new field

"action": the action that we intend to develop, which for the case will be CREATE

"multi_create": SUPER IMPORTANT, allows the creation of the additional field FOR ALL FEATURES of the same type (nodes, arcs, connec or gully depending on the chosen one)

"columnname": the name of the additional field. Totally prohibited special characters

"datatype": the type of data, check the available ones in this query:

(SELECT id FROM SCHEMA_NAME.config_typevalue WHERE typevalue = 'datatype_typevalue')

"widgettype": the type of widget to be used, check the available ones in this query:

(SELECT id FROM SCHEMA_NAME.config_typevalue WHERE typevalue = 'widgettype_typevalue')

"label":"addfield_all", the label to show the user in the dialog.

"ismandatory": if the field is mandatory for the user.

"fieldLength": field length.

"numDecimals": number of decimals.

"active": if the field is active or we want to leave it for another time.

"iseditable": if the field is editable for the user.

HINT: Be careful with the syntax of JSON requests. It is very easy to be wrong. We recommend being very careful at this point.

If the created field has value domains, we can consult the **E20_typevalue_tables protocol**, for how to generate these value domains and how to generate foreign keys between them.

There are more configuration fields of the element that are much better explained in the protocol **P09_config_form_fields**, so if you want more information you can consult it.

If we wanted to delete an additional field, we would proceed as follows:

SELECT SCHEMA.gw_fct_admin_manage_addfields($${

"client":{"lang":"ES"},

"feature":{"catFeature":"PUMP"},

"data":{"action":"DELETE","multi_create":"true","parameters":{"columnname":"pump_test"}}}$$)

NOTE: With this process the views are updated. If QGIS has the project loaded, we recommend exiting and re-entering QGIS for the changes to take effect and not cause any conflict.

REVIEWS

Action	User	Date
Created	Xavi T.	22/09/2020
Updated	Albert	03/01/2022