

## Technical Documentation

Reference : Plugin – Screen Customization

Version : V6.0

# Plug-in Screen Customization

## Introduction

The objective of this document is to explain how to use the plug-in "screen customization".

With this plug-in you can, for a given screen:

- ⇒ Change attributes of field: add "required", "hidden" or "read only" attribute
- ⇒ Change size for text and numeric field
- ⇒ Move field
- ⇒ Create new field
- ⇒ Define new list for select field
- ⇒ Delete custom field you created
- ⇒ Change attributes of field for given types, or for given status, or for given user profiles
- ⇒ Define default value for field
- ⇒ Create new Section
- ⇒ Move / Hide section

You will find change history listing features at the end of this document.

## Global structure of plug-in

The plug-in screen has three parts:

**On top:** selection of element (screen to customize) and action buttons.

**On left:** screen edition

**On right:** the result of the customization, as an example of what the screen will be

The first thing you will have to do is select an item on top list:

element :

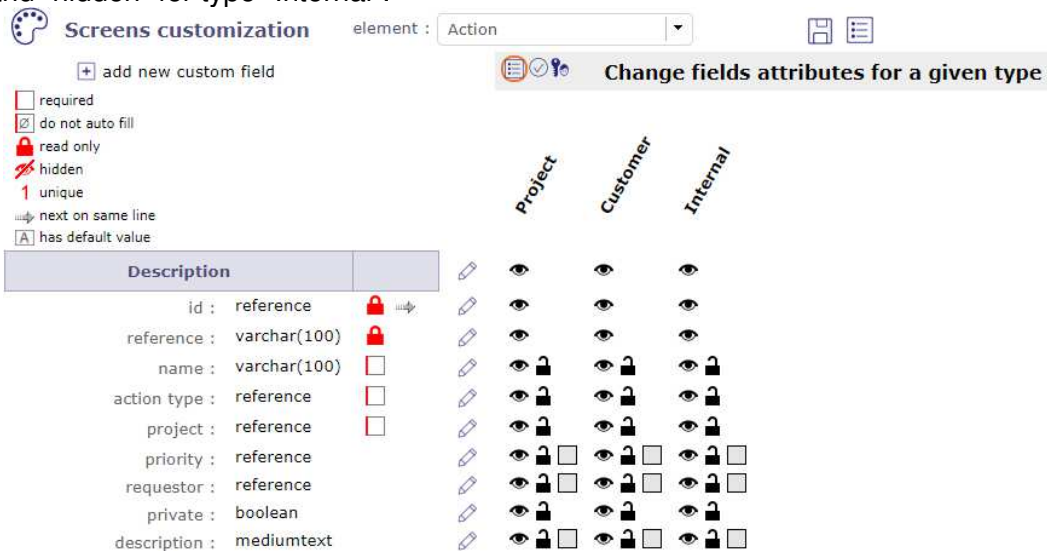
## Change field attributes for given type

You can define that some fields will be hidden or read-only or required for a given type. Select the Type icon in the top section:

### Change fields attributes for a given type

Then just click the corresponding attribute.

In the following example, field "priority" will be "required" for type "Project", "read-only" for type "Customer" and "hidden" for type "Internal":





**Screens customization** element : Action

**Change fields attributes for a given type**

- required
- do not auto fill
- read only
- hidden
- unique
- next on same line
- has default value

Description	Project	Customer	Internal
id : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
reference : varchar(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
name : varchar(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
action type : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
project : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
priority : reference	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
requestor : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
private : boolean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
description : mediumtext	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Changes must be either saved by clicking the save button  or reverted using the undo button 

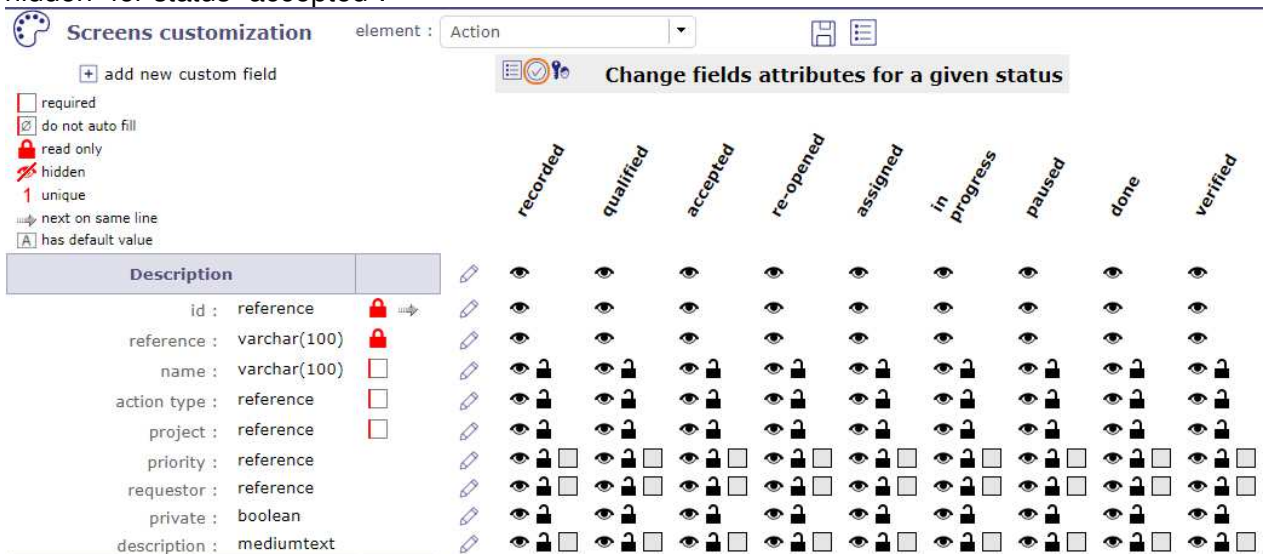
## Change field attributes for given status

You can define that some fields will be hidden or read only or required for a given status. Select the Status icon in the top section:

### Change fields attributes for a given status

Then just click the corresponding attribute.

In the following example, field "priority" will be "required" for "recorded", "readonly" for status "qualified" and "hidden" for status "accepted":




**Screens customization** element : Action

**Change fields attributes for a given status**

- required
- do not auto fill
- read only
- hidden
- unique
- next on same line
- has default value

Description	recorded	qualified	accepted	re-opened	assigned	in progress	paused	done	verified
id : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
reference : varchar(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
name : varchar(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
action type : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
project : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
priority : reference	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
requestor : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
private : boolean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
description : mediumtext	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Changes must be either saved by clicking the save button  or reverted using the undo button 

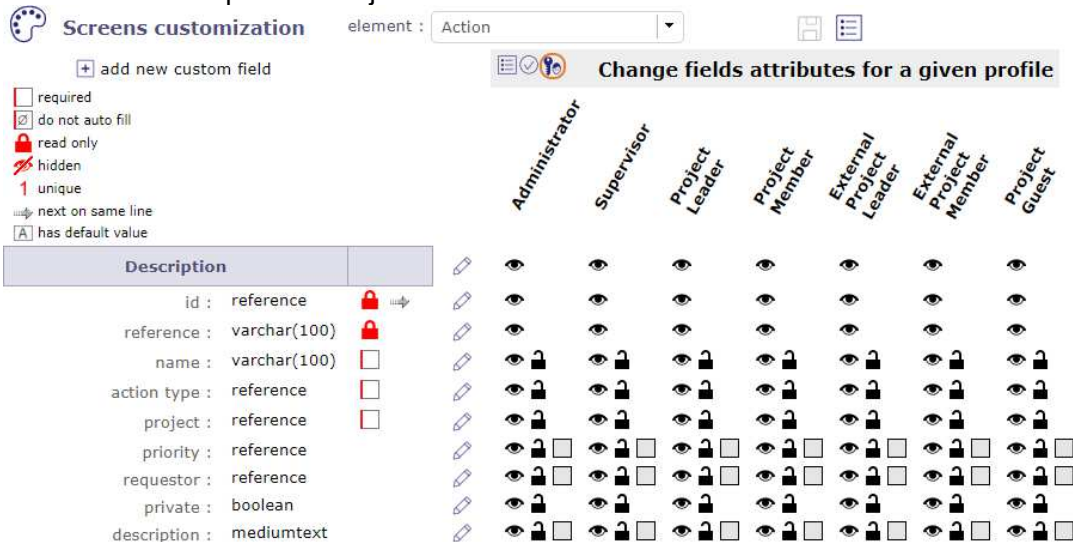
## Change field attributes for given profile

You can define that some fields will be hidden or read-only or required for a given profile. Select the Profile icon in the top section:

### Change fields attributes for a given profile

Then just click the corresponding attribute.

In the following example, field “priority” will be “required” for profile “Administrator”, “read-only” for profile “Supervisor” and “hidden” for profile “Project Leader”:





**Screens customization** element : Action

**Change fields attributes for a given profile**

add new custom field

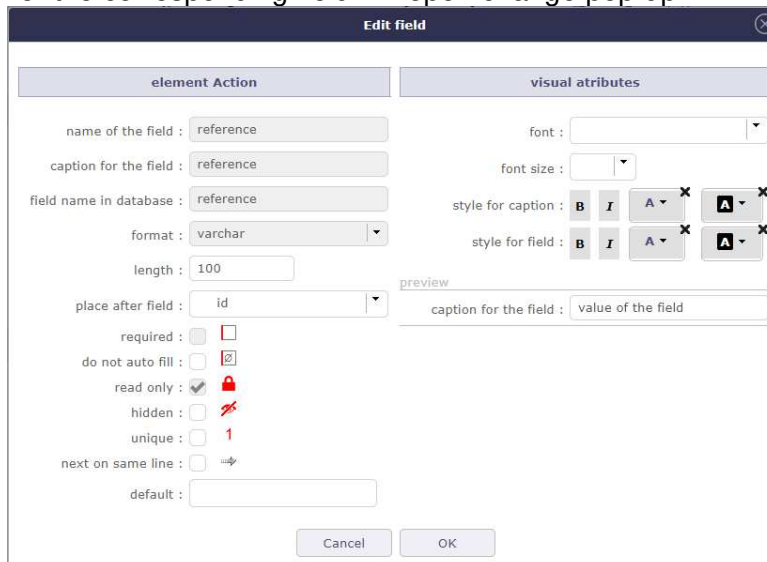
- required
- do not auto fill
- read only
- hidden
- unique
- next on same line
- has default value

Description	Administrator	Supervisor	Project Leader	Project Member	External Project Leader	External Project Member	Project Guest
id : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
reference : varchar(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
name : varchar(100)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
action type : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
project : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
priority : reference	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
requestor : reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
private : boolean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
description : mediumtext	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Changes must be either saved by clicking the save button  or reverted using the undo button 

## Change attribute

Click on edit button  for the corresponding field will open change pop-up.



**Edit field**

**element Action**

name of the field : reference

caption for the field : reference

field name in database : reference

format : varchar

length : 100

place after field : id

required :

do not auto fill :

read only :

hidden :

unique :

next on same line :

default :

**visual attributes**

font :

font size :

style for caption : B I A

style for field : B I A

preview

caption for the field : value of the field

Cancel OK

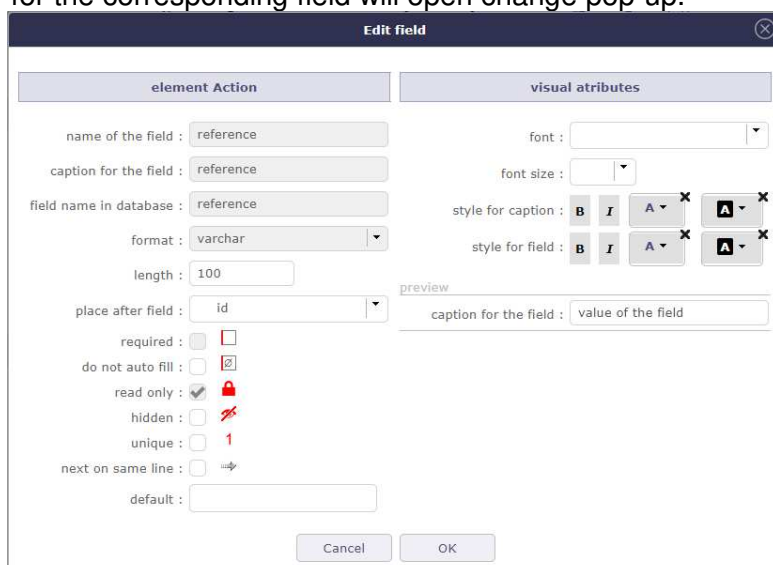
You can then check on of the corresponding attribute to apply it:

- **Required**: the field becomes mandatory
- **Do not auto fill** : for required field, the value is not automatically set to default value (first item)
- **Read only**: field cannot be modified
- **Hidden**: field is not displayed
- **Unique** : the field must have unique value
- **Next on same line** : will display the next field on the same line (without a caption)

Note that some attributes are exclusive (a field cannot be “required” and “hidden”).

## Change size for text and numeric field

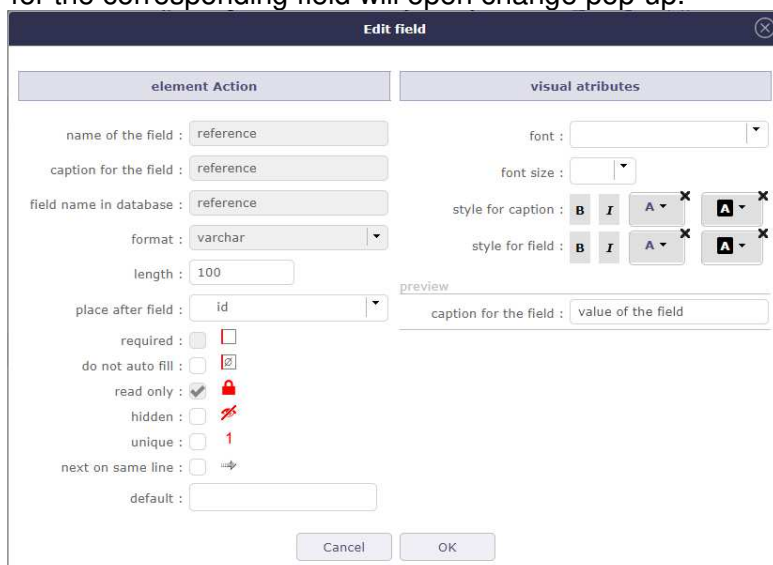
Click on edit button  for the corresponding field will open change pop-up.



Then you can resize text (varchar) and numeric (integer, numeric or decimal) fields. Pay attention that if you reduce size, existing data in the corresponding column may be truncated.

## Move field

Click on edit button  for the corresponding field will open change pop-up.



Change “place after field” to move the field after the corresponding field. You can for instance select “Description” section to move the field at first place.

**Hint:** Some fields are displayed on the same line and it may give weird result moving after these fields.

## Define default value for field

Click on edit button  for the corresponding field will open change pop-up.

Change the “default” value to enter value for this field on new items.

The default value is always a textual field.

For **boolean** field, enter ‘on’ to set it checked by default.

We did not implement selection depending on field type.

Why? Why didn’t we give a date selector for date field or a filtering select list for reference field?

Just because for such fields, there is very small interest to set default value as static value.

If you just need it, it is easy to enter it in textual field. For instance, if you want to set a date to ‘01/01/2017’, just enter ‘2017-01-01’ as default value.

But what is more likely, is that you’d like to have value that will be calculated, for instance depending on current date. You will be able to do so with the **###EVAL###** feature.

It is possible to define an evaluated formula as default value.

Just enter **###EVAL###** followed by some PHP code that will be evaluated. You just need to write an expression that can be evaluated as the value of a string.

For instance, if you write

```
###EVAL###myEvaluationFormula'
```

Then

```
$value=myEvaluationFormula;
```


must be a valid PHP expression.

Every function available in ProjeQtOr can be used as evaluation formula.

Examples

Evaluation formula	Evaluated value
<b>###EVAL###</b> date('Y-m-d')	Current date
<b>###EVAL###</b> addDaysToDate(date('Y-m-d'),7)	Current date + 7 days (next week)
<b>###EVAL###</b> SqlList::getNameFromId('Profile', getSessionUser()->getProfile())	Get the name of the profile for current user
<b>###EVAL###</b> (getSessionUser()->isResource) ?getSessionUser()->id:null;	If current user is a resource, get its ID (for instance to set responsible)
<b>###EVAL###</b> \$this->field1 + \$this->field2	Concatenation of field1 and field2

If you define a default value for a field that is “readonly” (always readonly, not readonly depending on type, status or profile), this field will be calculated on each save operation.

So default value then becomes a calculated value and will appear with specific icon .

## Change visual styling

Edit field en change values for visual attributes on right part of edit pop-up

The 'Edit field' dialog box is divided into two main sections: 'element Action' and 'visual attributes'.  
 In the 'element Action' section, the following fields are visible:  
 - name of the field : reference  
 - caption for the field : reference  
 - field name in database : reference  
 - format : varchar  
 - length : 100  
 - place after field : id  
 - required :   
 - do not auto fill :   
 - read only :   
 - hidden :   
 - unique :  1  
 - next on same line :   
 - default :   
 In the 'visual attributes' section:  
 - font :   
 - font size :   
 - style for caption : B I A A (with dropdown arrows and close buttons)  
 - style for field : B I A A (with dropdown arrows and close buttons)  
 A 'preview' section shows the caption for the field as 'value of the field'.  
 At the bottom are 'Cancel' and 'OK' buttons.

You can change font and font size for both caption and field.

Then you can change some styling separately for caption or for field (bold, italic, text color, background color). The result will be displayed in the “preview” part.

Notice that some fields don't give access to visual attributes for field as this has no meaning (for instance for sections or checkboxes).

## Create new field

Click on “add” button add new custom field to open the “Edit field” pop-up in creation mode.

The 'Edit field' dialog box in creation mode has the following fields:  
 In the 'element Action' section:  
 - name of the field :   
 - caption for the field :   
 - field name in database :   
 - format : varchar  
 - length :   
 - place after field : Description  
 - required :   
 - do not auto fill :   
 - read only :   
 - hidden :   
 - unique :  1  
 - next on same line :   
 - default :   
 In the 'visual attributes' section:  
 - font :   
 - font size :   
 - style for caption : B I A A (with dropdown arrows and close buttons)  
 - style for field : B I A A (with dropdown arrows and close buttons)  
 A 'preview' section shows the caption for the field as 'value of the field'.  
 At the bottom are 'Cancel' and 'OK' buttons.

You will then define properties of the field, with same behaviour as for editing an existing field, except that you will not have to define field name.

Field caption is not mandatory if you define a field name that correspond to an existing caption, and it is even forbidden in this case.

Field name must be alphanumeric, starting with alphabetic character in lowercase.

Only exception is field "Origin" that can be added to insert reference to external origin object.

## How to create a field that will be a list

- ⇒ Name field as idXxxxx or yyyy\_\_idXxxxx  
(second way allows to create several fields referencing same class)
- ⇒ Xxxxx must correspond to existing object in ProjeQtOr or new list you defined (see below)

The data type must be "reference". This is a specific format that will be stored in database as int(12).

## Adding some message after a field

- ⇒ Create a field with type message or name field as \_lib\_Xxxxx
- ⇒ Move this field after field you want to extend
- ⇒ On the field you want to extend, add attribute "next on same line"  
As this feature is designed to add some text "after" a field, if you omit this step the text won't be displayed.

## Delete custom field you created

Click on delete button  that appears beside your custom field `my field : varchar(10)` 

A confirmation message will appear and field can then be removed.


Pay attention that data existing in the corresponding column will be lost.

You can only delete fields you added.

Existing fields can only be hidden, never deleted.

## Reset screen definition to standard version


You can get back to standard version of the screen with dedicated button:

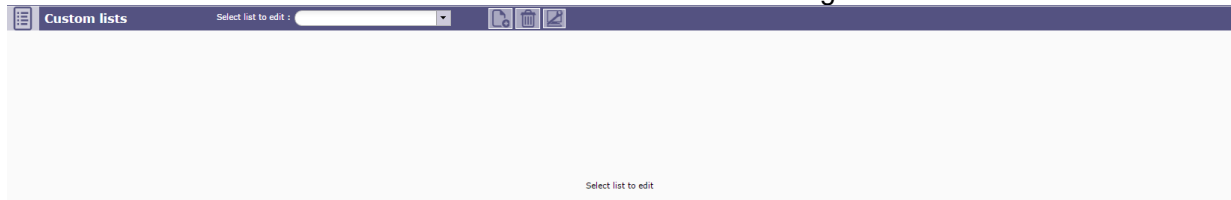
 reset screen to  
standard disposition


This will revert all changes made to the screen to retrieve the standard version of the screen.

Note that this will delete custom created fields, with all their data stored in the database.

## Define new list for select field

Click on "custom lists" button  to access the custom lists management.



Click on "new list" button  to open the list creation pop-up.

Just define the class and the name of the list.

The **class** is the name of the new object class for your custom list.

This value must be a valid PHP class name and so contain only alphabetic characters (without spaces) and must start with an uppercase character.

Example: *MyList*.

You will refer to this list creating a field named 'idClass'.

In the example: *idMyList*

The **name** is the name of the list as it will be displayed in edition screen for the list (see below).

## Edit custom list content

Just select your custom list if the selector

Select list to edit :


You will then be able to edit content of the list like any other list in ProjeQtOr.



## Delete custom list you created

Select your custom list if the selector

Select list to edit :

and click the delete 

Pay attention that all data stores for this list will be lost.

You cannot delete a list used as a custom field in a screen: you have to remove it first.



## Limits and constraints

### Progress sections selection

Progress sections are not included in main screen definition. They have their own selection in the list.

For instance, for "Activity", "progress" section of activity cannot be changed through the "Activity" selection. You must select the "Activity - Progress" item in the list.

### Progress sections change

Due to very strict positions of fields in tabular view of progress sections, it is not possible to add new fields in these sections, nor to move fields in this section. All is possible is to change attributes of fields, for instance to hide some of them.

### Customizable screens

Not all screens are available for customization. For instance, the parameters value lists are not available. This is mostly because these screens are very simple and do not need customization.

But it is also because some technical structure has to be defined in standard framework for objects in order to be customizable. Most of the important objects have been processed, but some may be missing for your needs. Don't hesitate to post a request in ProjeQtOr forum for an addition in the selectable items.

### Several fields on same line

Sometimes, several fields are displayed on the same line.

For instance, "id" and "reference" are always displayed on first line.

If you hide one of these items or insert an item between them, you may face unexpected behaviour... or not. Just try, but be aware that you may have to revert your change if something weird happens.

## Change history

Feature	Version	Compatibility (ProjeQtOr Version)
Change the attributes "readonly", "hidden" and "required" Change the size of a text (varchar) or numeric field Move a field Add a new field Delete a field Manage Custom Lists Change the attribute "hidden" depending item type	V1.0	V5.2.3
Control of field name format (for new field)	V1.1	V5.2.3
Edit and customize labels	V1.2	V5.2.3
Reset customization to return to standard screen	V2.0	V5.2.3
Bug fixings	V2.1	V5.2.3
Hide a column if all elements are hidden Hide a line if all elements are hidden	V2.1	V5.4.0
Define a default value Define attribute "hidden" depending on status of the item Define attribute "hidden" depending on profile of user Be able to hide a "label" Hide the label for hidden fields in a table display format Add WorkElement to customizable items (work part of tickets) Move the label with the fields in a table display format Bug fixings about moving a field in a table	V3.0	V6.0.3
Hide headers for fields hidden by type	V3.1	6.0.6
Change the attribute "readonly" for a given type, status or profile Change the attribute "required" for a given type, status or profile Hide a section Hide a section for a given type, status, or profile Be able to specify the default value "on" for a boolean field Hide mandatory fields for a given type, status or profile Manage "readonly" with a default value as calculated field	V4.0	6.2.2
Anomaly when customizing Meeting if Live Meeting plugin is installed	V4.1	6.2.2
Manage sections: create new section / move section / hide section Be able to apply a style (css) to the field or its label (color, font, ...) Be able to position a field "next to another" Be able to hide a "Specific" field (button, ...)	V5.0	6.4.0
Manage duplicate references on same class (yyyy__idXxxx) Forbid some key words (key, select, table, ...) Bug fixings	V5.1	6.4.4
Bug fixings	V5.2	6.4.4
Avoid some reserved word on name for fields Possibility to create field "color" Bug fixings	V5.3	6.4.4
Manage attribute "Unique" Manage attribute "Do not auto fill" (for required fields) Show that field is calculated when it has default value and is readonly Manage text to display after a given field (type message) Bug fixings	V6.0	9.2.2