Make fields read only on windows

Summary	
Module	Universal Functions, Validation System
Level	Advanced
Requirements	2.9.0.0 or higher

Scenario

Customer wants to make the Mobile Phone and the Project fields, in the General tab of the Business Partner Master Data window, read only.

Needed Configuration

Making the Mobile Phone field read only:

1. A Universal Function of type Macro to move focus and disable the Mobile Phone field.
2. A B1 Validation system check when the user tries to focus on the Mobile Phone field.

Making the Project combobox read only:

1. A Universal Function of type Macro to focus another field and disable the Project combobox.
2. A Universal Function of type Macro to block the event.
3. A B1 Validation system check when the user tries to click on the Project combobox.
4. A B1 Validation system check when the user tries to select something in the Project combobox.

Step 1: Making the Mobile Phone field read only

The first step is to make the Mobile Phone filed read only. To do this we need to create a Universal Function of type macro, that moves the focus to another field, and disables the Mobile Phone field. Then we need to use the B1 Validation System to fire our Universal Function at the right time.

To create universal functions please navigate to Administration > Add-Ons > B1 Usability Package > Module configuration >Universal Function configuration
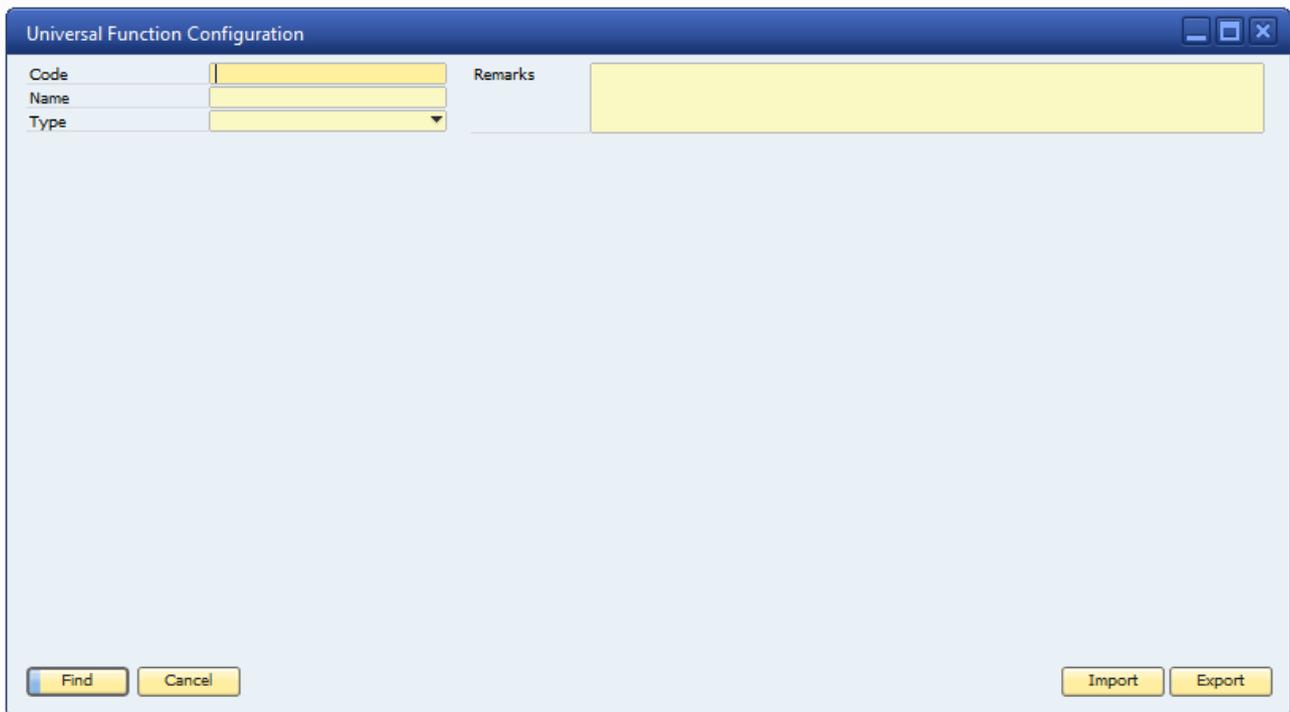
Start by switching to add-mode and choose the Universal Function type called Macro and enter the following macro:

Focus($[$3.0.0]);
Disable($[$51.0.0]);

The following screenshot shows the finished Universal Function, with some informative comments:
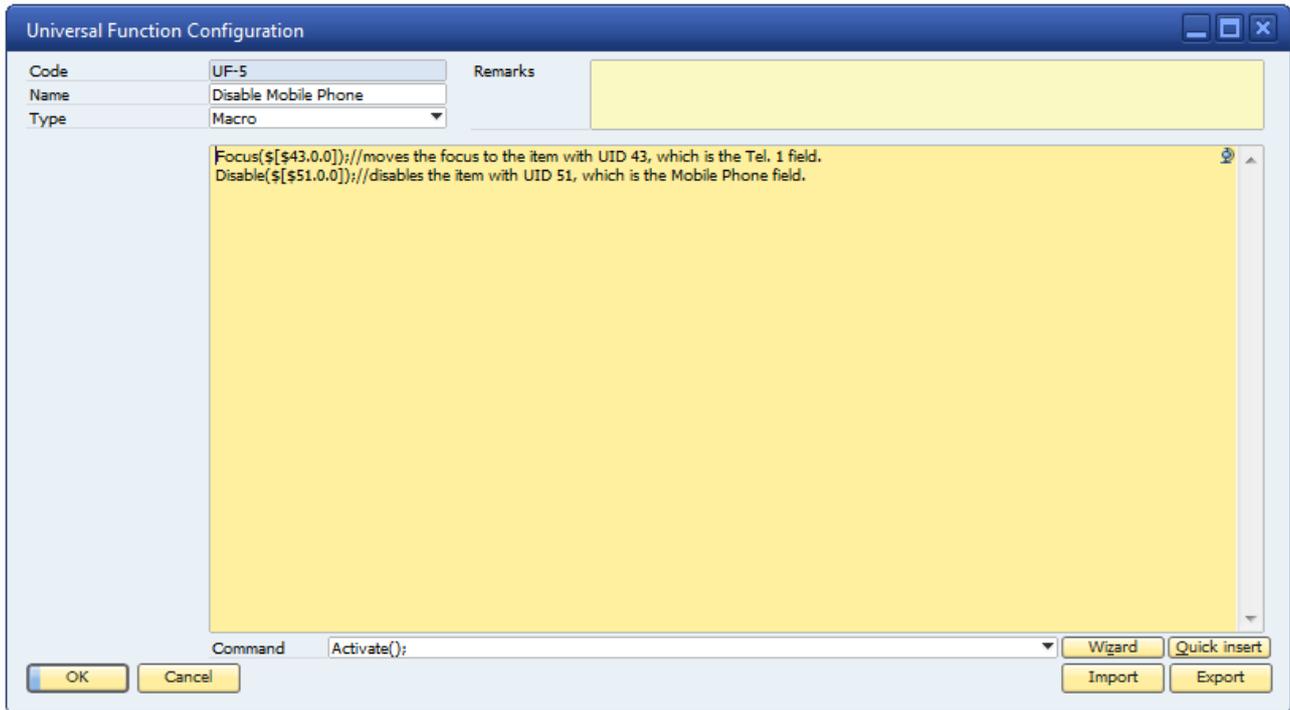
To make it easier to describe, we will reference the above Universal Function with the name Disable Mobile Phone.

When you have made a Universal Function similar to the above, you need to configure B1 Validation System to fire your Universal Function at a specific time. Namely when the user tries to focus on the Mobile Phone field, by clicking in the field, in the Business Partner Master Data window.

You can find the B1 Validation System Configuration window by browsing to the following location in SAP B1: Administration > Add-ons > B1 Usability Package > Module Configuration > B1 Validation Configuration.
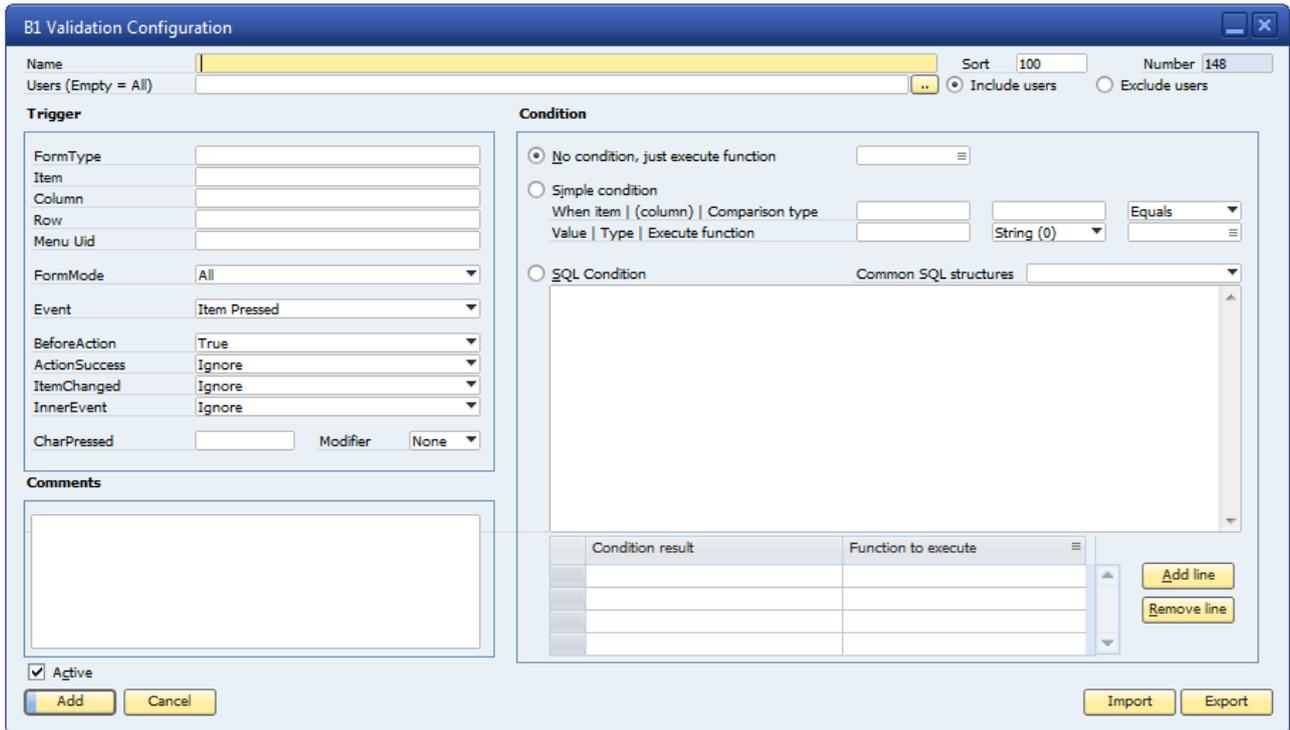
In this window, you need to fill in the correct information about when to fire your Universal Function. As we are trying to make a field read only on the Business Partner Master Data window, we need to write in the FormType, which is 134 for this form. You can find the FormType and item unique id's by enabling the System Information at View > System Information.

The Item we are trying to make read only is 51, so we write this as well at the Item field. We want this validation to take place in all FormModes, so we choose All in the FormMode combobox. The event we want to fire on is the Got Focus event, so we choose this in the Event combobox. We want to catch this when the item, in this case the Mobile Phone field, has been clicked by the user, so we choose BeforeAction false. The rest of the controls in the configuration window are left at their default values, except that we need to select the function to execute when this validation is triggered. This is done in the Condition section, where we choose to execute the Universal Function Disable Mobile Phone, which we created above. The following screenshot shows the window when it is filled out:
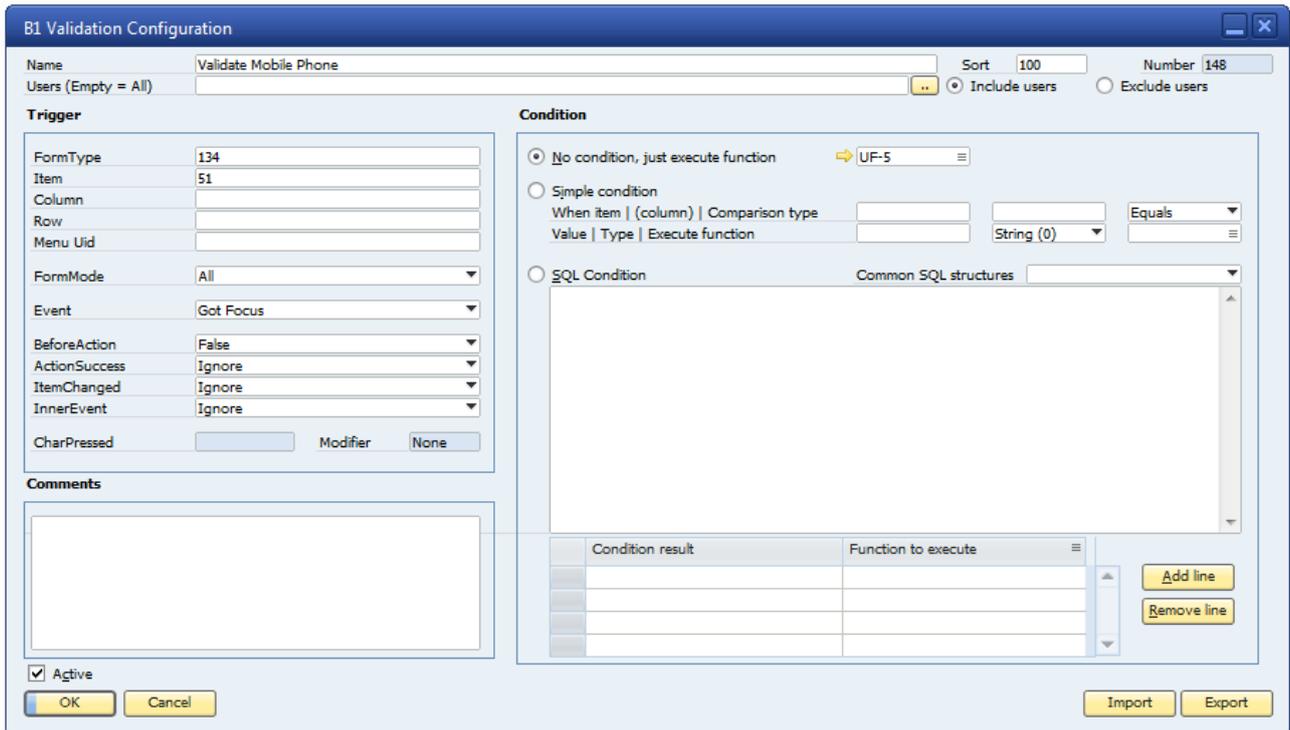
Step 2: Making the Project combobox read only

The second step is to make the Project combobox read only. This will take a bit more effort, however, the extra effort required is limited. In order to do this, we need to create two Universal Functions of type macro and configure the B1 Validation System to fire them at the right time. As we have two Universal Functions, we need two B1 Validation System configurations.

The first Universal Function looks like this:

Focus($[$43.0.0]);
Disable($[$222.0.0]);

The screenshot below shows the finished Universal Function, with some informative comments.
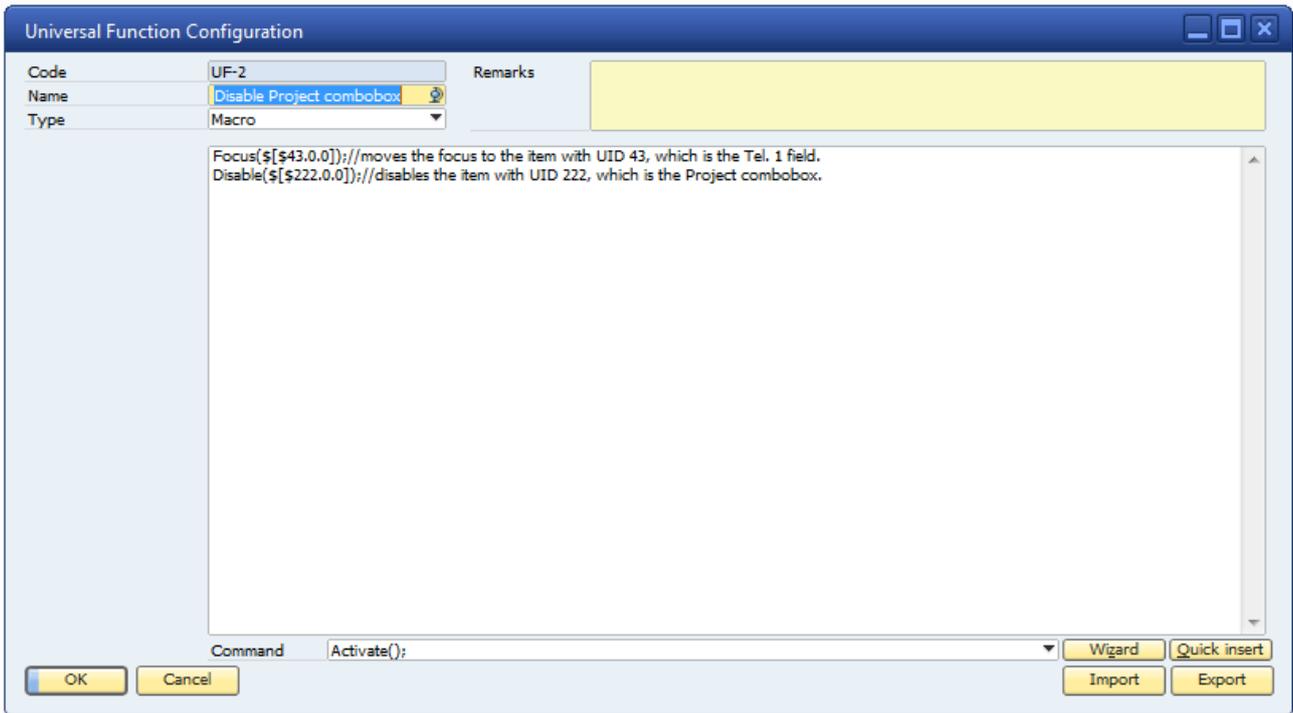
The above Universal Function is referenced by the name Disable Project combobox.

The next Universal Function needed is quite simple and looks like this:

Block();

Again, this Universal Function is of type macro. Below is a screenshot of how it looks-with a comment describing its functionality.
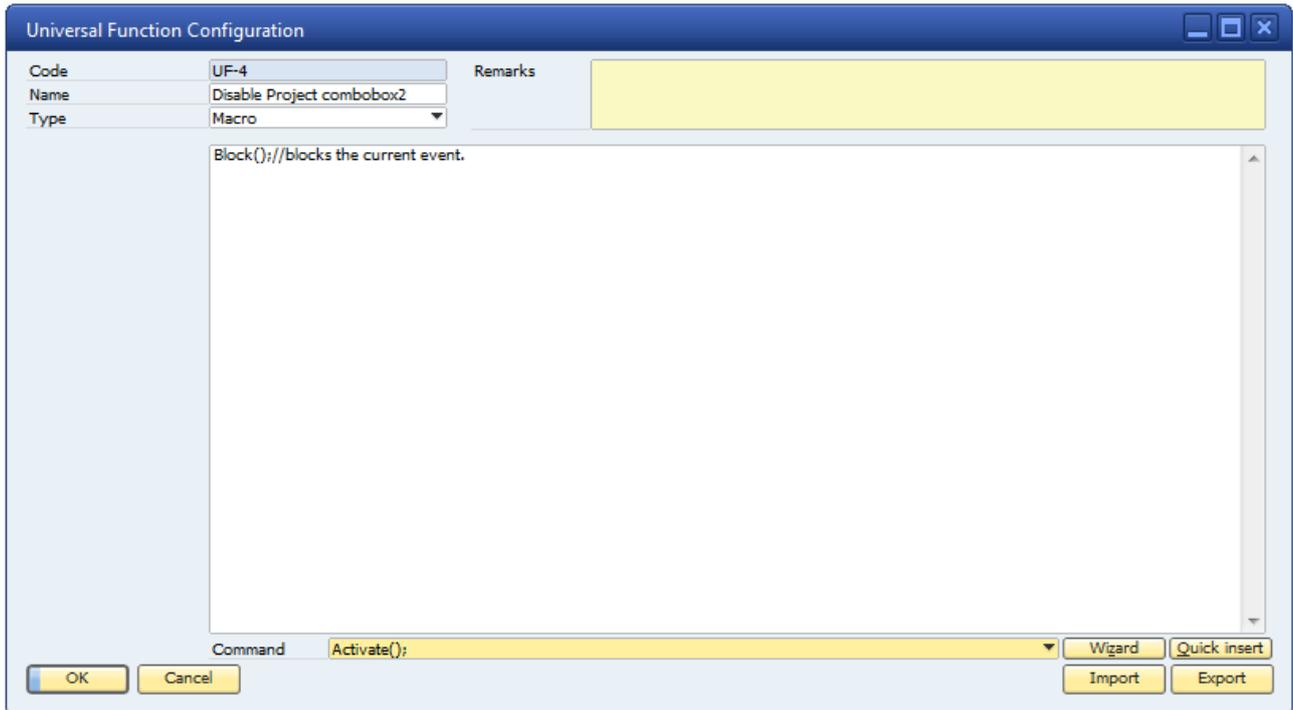
The above Universal Function is referenced by the name Disable Project combobox2.

After we have set up these two Universal Functions, we want to configure the B1 Validation System to fire them at a specific time. As explained above, we need two configurations, as we have two Universal Functions we want to execute. The FormType is still 134 (Business Partner Master Data). The Project combobox has UID 222, so we type this in as the Item. We choose all FormModes. The Event to fire on is, Click. BeforeAction is true because we want to interfere before the Project combobox actually has focus. The rest of the options are left at their defaults, except that we choose the Universal Function named Disable Project combobox as the Universal Function to fire. This screenshot shows the B1 Validation System configuration.
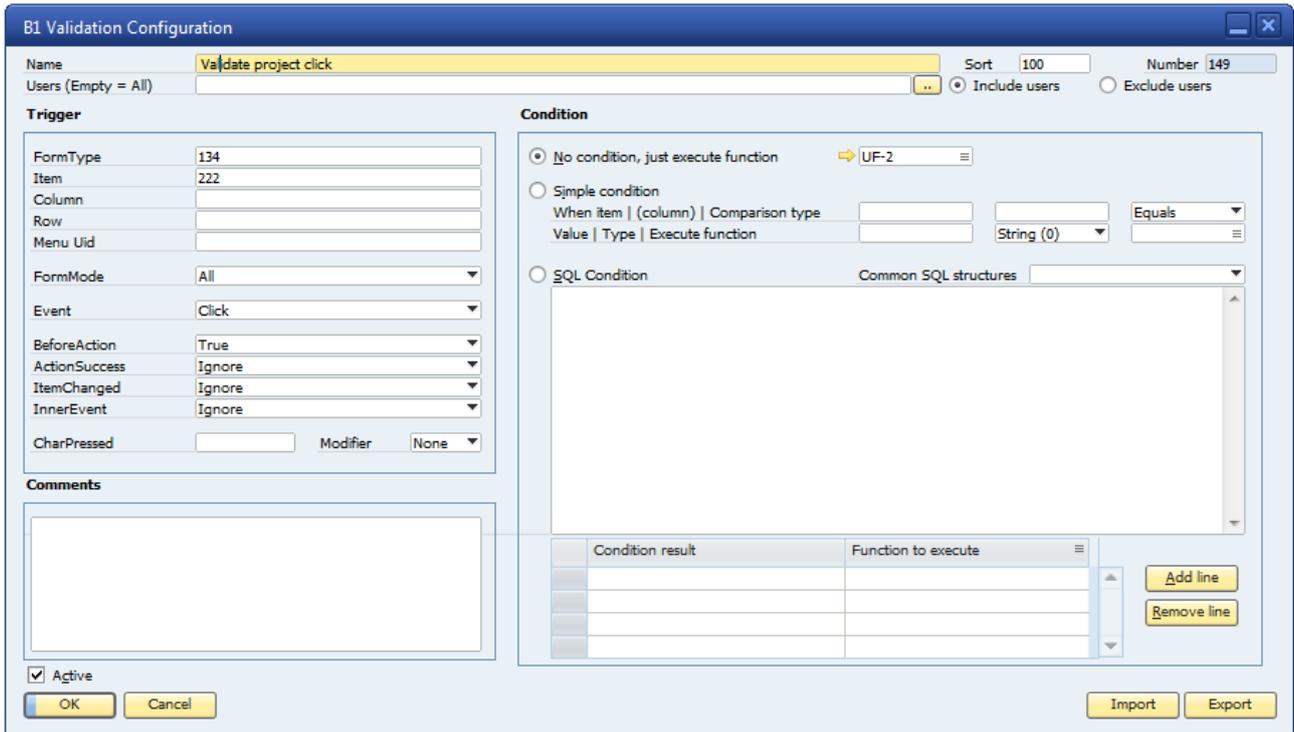
To execute the other Universal Function we created, to make the Project combobox read only, we need one more B1 Validation System configuration. The FormType and Item are the same. We still want this configuration to work in all FormModes, so we pick all. As the Event type we pick Combobox Select. This will fire when we select something in the Project combobox. BeforeAction is set to true, because we want to interfere before something is actually selected in the Project combobox. All the other options is left at their defaults except that we chose to fire the Universal Function named Disable Project combobox2. The screenshot below shows the B1 Validations System configuration used to do this:
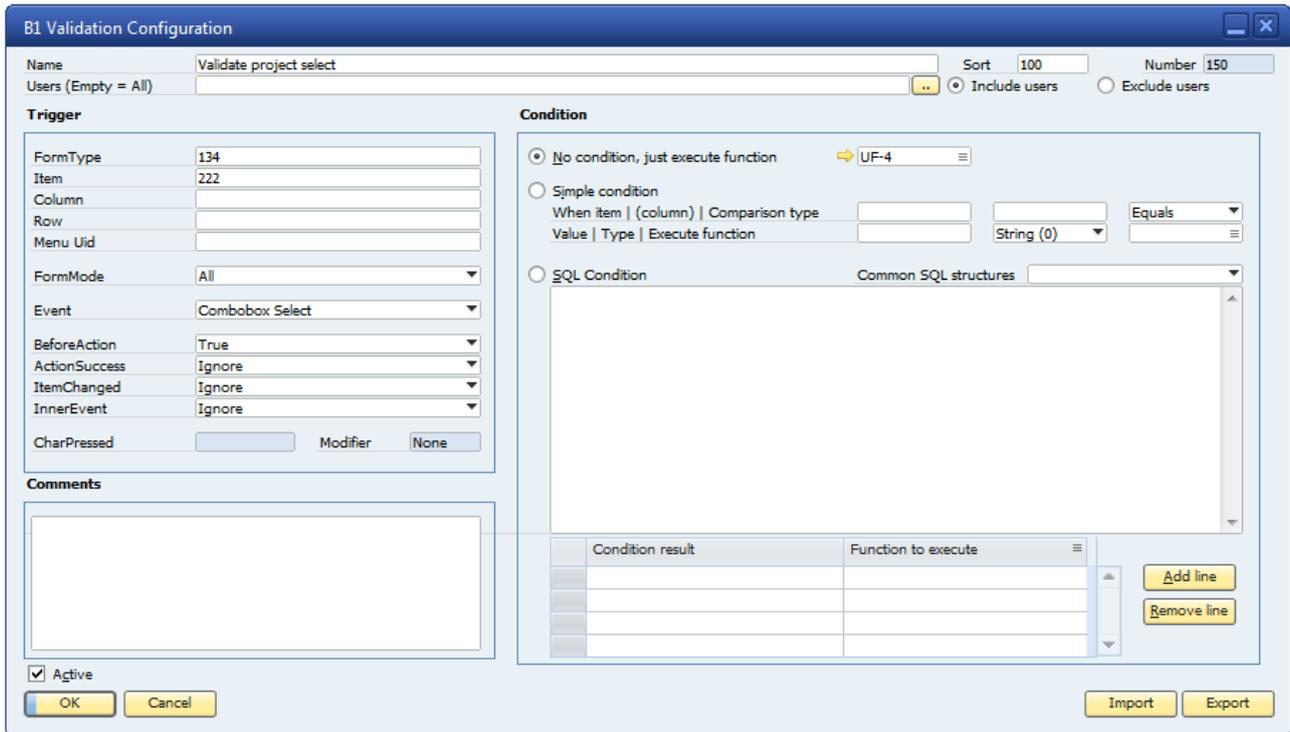
Use of functionality

Testing this functionality is easy. Just go to the Business Partner Master Data window and try to access the fields you have made read only. There are a couple of different ways to enter the fields, so to be certain that what you have configured works as intended, each of these methods should be tested.

1. Entering the field by clicking in it.
2. Entering the field by pressing the TAB key until you are in it.

These two ways are the basic ways of entering a field, but other more complicated methods exist as well. As different kind of fields act differently, they need to be tested differently. The Project field is a combobox and can as such be entered by going from update to ok mode, as this unlocks the field. After this is done, pressing the TAB key to enter the field should be possible. However, trying to select something in this field, using the mouse, will move the focus to the Tel. 1 field, and lock the Project field. Using the keyboard to select something is not possible, as the selection is blocked before it ever happens.

If these tests succeed, your respective fields are now read only.