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.

Business Partner Master D	Data			
Code	C20000 Customer 🔻			Local Currency
Name	Norm Thompson Airport Store		Account Balance 📫	63591.34
Foreign Name			Deliveries 📫	1861.03
Group	Construction 🔻		Orders 📫	13744.43
Currency	US Dollar 💌		Opportunities 📫	2
Federal Tax ID	US25-987634			
Ge <u>n</u> eral Contac	t Per <u>s</u> ons <u>A</u> ddresses	Payment Terms	Payment System Accounting	Propert <u>i</u> es Remar <u>k</u> s
Tel 1			Contact Person	Norm Thompson
Tel 2	(ID No. 2	· · · · · · · · · · · · · · · · · · ·
Mobile Phone	+4587329000			
Fax				
E-Mail	rwj@boyum-it.com		Remarks	
Web Site				
Shipping Type	UPS Ground 🔻		Sales Employee	Bill Levine
Password				
Factoring Indicator			User-Defined Commission	15.000
Project	Government Works		BP Channel Code	
Industry	×		Technician 📫	Buyer, Fred =
Business Partner Type	Company 🔻		Territory	≡
			Language	English 💌
			El. Doc. Export Format	•
Alias Name O Active Inactive Advanced	From To		Remarks	
OK Cancel]		Related Service Calls Ad	ctivity <u>R</u> elated Activities

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

Universal Function Configuration		
Code Anno Type Type	Remarks	
Find Cancel		Import Export

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:

Universal Function (Configuration		
Code	UF-5	Remarks	
Name	Disable Mobile Phone		
Туре	Macro		
	Focus(\$[\$43.0.0]);//moves the f	focus to the item with UID 43, which is the Tel. 1 field. e item with UID 51, which is the Mobile Phone field.	
	Command Activate();	▼ Wi	ard Quick insert
OK Can	cel	Im	port Export

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.

unite .		Sort 100 Number 148
sers (Empty = All)		🛄 💿 Include users 📀 Exclude users
rigger		Condition
FormType tem Column low Menu Uid FormMode	All	 No condition, just execute function Simple condition When item (column) Comparison type Value Type Execute function Equals Equals String (0) ▼ SQL Condition Common SQL structures Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition Supple Condition
vent SeforeAction ActionSuccess temChanged innerEvent CharPressed	True Ignore Ignore Ignore Modifier None	
omments		
omments		Condition result Function to execute

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:

B1 Validation Config	juration	
Name	Validate Mobile Phone	Sort 100 Number 148
Users (Empty = All)		. Include users Exclude users
Trigger		Condition
FormType	134	No condition, just execute function ⇒ UF-5
Column	51	Simple condition
Row		When item (column) Comparison type Equals 🔻
Menu Uid		Value Type Execute function String (0)
Here on		
FormMode	All	Common SQL structures
Event	Got Focus	
BeforeAction	False	
ActionSuccess	Ignore	
ItemChanged	Ignore	-
InnerEvent	Ignore	
CharPressed	Modifier None	
Comments		
		Condition result Function to execute
		Add line
		Remove line
✓ Active		
OK Can	cel	Import Export

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.

Universal Funct	n Configuration	
Code	UF-2 Remarks	
Name	Disable Project combobox	
Туре	Macro	
	Focus(\$[\$43.0.0]);//moves the focus to the item with UID 43, which is the Tel. 1 field. Disable(\$[\$222.0.0]);//disables the item with UID 222, which is the Project combobox.	*
		-
	Command Activate():	Quick insert
ок	ancel Import	Export

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.

Universal Function (Configuration		
Code	UF-4	Remarks	
Name	Disable Project combobox2		
Туре	Macro		
	Block();//blocks the current even	ent.	
			T
	Command Activate();	▼ Wi <u>z</u> ard	Quick insert
OK Can	cel	Import	Export

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.

	Validate project click		Sort 100	Number 149
sers (Empty = All)			. O Include users	 Exclude users
rigger		Condition		
FormType	134	No condition, just execute function	UF-2 =	
item	222			
Column		 Simple condition 		
Row		When item (column) Comparison type		Equals 🔻
Menu Uid		Value Type Execute function	String (0)	=
FormMode	All	O SQL Condition	Common SQL structures	*
Event	Click			*
BeforeAction	True			
ActionSuccess	Ignore 🔻			
ItemChanged	Ignore 🔻			
InnerEvent	Ignore 💌			
CharPressed	Modifier None 🔻			
omments				
onnenes				_
		Condition result F	Function to execute	
				Add line
				<u>Remove line</u>
				<u>Remove line</u>

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:

B1 Validation Config	guration	
Name	Validate project select	Sort 100 Number 150
Users (Empty = All)		Include users Exclude users
Trigger		Condition
FormType	134	No condition, just execute function → UF-4 ■
Item	222	O Simple condition
Column		When item (column) Comparison type Equals
KOW		Value Type Execute function String (0) 🔻 🔳
Menu Uid		
FormMode	All	O <u>S</u> QL Condition Common SQL structures ▼
Event	Combobox Select 💌	
BeforeAction	True	
ActionSuccess	Ignore 🔻	
ItemChanged	Ignore 🔻	
InnerEvent	Ignore 💌	
CharPressed	Modifier None	
Comments		
		v
		Condition result Function to execute =
		Add line
		<u>Remove line</u>
		· · · · · · · · · · · · · · · · · · ·
✓ Active		
OK Can	icel	Import Export

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.