



# Argco

Doma 6  
Application administrator manual  
04. Properties and Edit checks

**A new era in document management.**

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# Doma 6

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## Application administrator manual

*04. Properties and Edit checks*

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### **Manual Modification Follow-Up**

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## 1 Properties

### 1.1 Introduction

#### 1.1.1 Definition

A property is an information carrier: It contains information about the folder, document, workflow, dossier or procedure instance where it is linked to.

It allows the user to find the property when he searches on the value that is linked to the folder, document, dossier and workflow item.

**Synonyms:** metadata, index, search key.

**Example:**

- For an invoice document, the *supplier* and *amount* can be properties.
- For a letter, *sender*, *receiver* and *subject* can be properties.

#### 1.1.2 Different kinds of properties

DocRoom has different kinds of properties, each have their own specific characteristics:

- Pool properties
- Folder category properties
- Document category properties
- Workflow category properties
- Dossier category properties
- Procedure properties

##### 1.1.2.1 Pool properties

**Definition**

A pool property is a property that can be linked to all different categories, i.e. to document categories, folder categories workflow categories and dossier categories.  
In that way, a pool property can be used to search over the different categories.

**Advantage**

- Pool properties can be made available for all categories and thus can be used to search over the different categories.

**Disadvantage**

- When using only pool properties instead of properties linked to a category, you will get a long list of pool properties, which are perhaps only linked to one category.

**When configuring a pool property, you can:**

- Define the property type of the pool property.
- Configure the property completely: give a name to the property, enter translations for the property name, enter tooltips in different languages ...
- Link it to one or more categories.

##### 1.1.2.2 Folder category properties

**Definition**

A folder category property is a property that is created for one particular folder category. As a result, it is only available for the DocRoom folders of that category. Thus, a folder category property can only be used to search for items of the category where it is linked to.

Also if you want to edit or delete a folder category property, you will have to do this from the detail of the folder category where it is linked to.

#### 1.1.2.3 Document category properties

**Definition**

A document category property is a property that is created for one particular document category. As a result, it is only available for the DocRoom documents of that category. Thus, a document category property can only be used to search for items of the category where it is linked to.

Also if you want to edit or delete a document category property, you will have to do this from the detail of the document category where it is linked to.

**Advantage**

- Properties on category level ensure that the list of pool properties is not unnecessary long.

**Disadvantage**

- Properties on category level can only be used to search for items of the specific category. They cannot be used to do a search over different categories.

#### 1.1.2.4 Workflow category properties

**Definition**

A workflow category property is a property that is created for one particular workflow category. As a result, it is only available for the workflow categories of that category. Thus, a workflow category property can only be used to search for items of the category where it is linked to.

Also if you want to edit or delete a workflow category property, you will have to do this from the detail of the workflow category where it is linked to.

Workflow category properties are available on DocRoom level and on procedure level of the workflow category.

**Advantage**

- Properties on category level ensure that the list of pool properties is not unnecessary long.
- Search over DocRoom and Routing is possible.

**Disadvantage**

- Properties on category level can only be used to search for items of the specific category. They cannot be used to do a search over different categories.

#### 1.1.2.5 Procedure properties

**Definition**

A procedure property is a property that is created for one particular procedure. As a result, it is only available for that procedure. Thus, a procedure property can only be used to search for items of the procedure where it is linked to.

Also if you want to edit or delete a procedure property, you will have to do this from the detail of the procedure where it is linked to.

**Advantage**

- Procedure properties can be used to search for items in Routing.

**Disadvantage**

- Procedure properties are not automatically available on DocRoom level.

### 1.1.2.6 Dossier category properties

#### Definition

A dossier category property is a property that is created for one particular dossier category. As a result, it is only available for the DocRoom documents of that category. Thus, a dossier category property can only be used to search for items of the category where it is linked to. Also if you want to edit or delete a dossier category property, you will have to do this from the detail of the dossier category where it is linked to.

#### Advantage

- Properties on category level ensure that the list of pool properties is not unnecessary long.

#### Disadvantage

- Properties on category level can only be used to search for items of the specific category. They cannot be used to do a search over different categories.

### 1.1.3 Property types

When defining a property, you need to select a property type. This property type defines the appearance and the syntax of the property.

The next property types are available in DocRoom:

1. Assignee
2. AutoNumber
3. Boolean
4. CodeLookup
5. Currency
6. Date
7. DateTime
8. Decimal
9. Email
10. ExternalLookup
11. Hidden
12. HTML
13. List
14. Lookup
15. ManagedList
16. Number
17. String
18. Tab
19. Table
20. Vessel
21. Webservice

## 1.2 General Configuration

### 1.2.1 Introduction

The configuration of properties is done in the Doma Admin module.

- Double-click on the item *Pool properties* in the navigation tree of the *Doma Admin module* to see an overview of the existing pool properties.
- OR
- Select the item *Pool properties* in the navigation tree of the Doma Admin module and click on the right mouse button. A menu appears. Choose *New* to create a new pool property, *Open* to open the list of existing properties (e.g. to edit the document.)

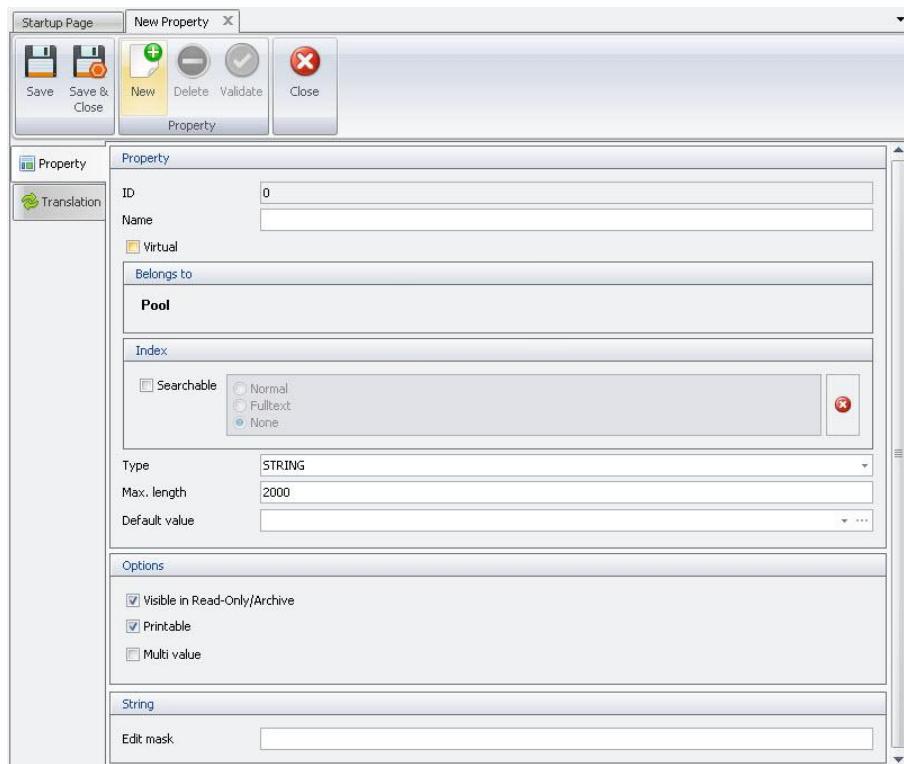
### 1.2.2 Basic configuration

All properties require a basic configuration. Next to this basic configuration, properties have their own specific configuration possibilities, linked to their specific type.

Below we give an overview of the basic configuration. The fields mentioned in this overview will be available for all properties of all property types.

#### 1.2.2.1 Tab property

This tab contains the main configuration items of the property. It appears initially together with the tab *Translation*. After save, other tabs will appear.



A number of fields are available for all property types. These are explained here below.

Field name	Description
<b>ID</b>	<i>Read-only field. Unique reference of the property, automatically assigned by the application.</i>
<b>Name</b>	<i>Name of the property. This name appears as default label of this property in the web interface if no translation labels are used.</i>
<b>Virtual</b>	<input checked="" type="checkbox"/> A virtual property. Data will not be saved to the database. Used as intermediate variable in calculations. <input type="checkbox"/> The property values will be saved in the database.  For the properties Number, Decimal and Currency, an extra field Formula appears when the property is made virtual.
<b>Formula</b>	Only for virtual properties of type Number, Decimal and Currency: enter a formula that will be recalculated on every load or change of the object . Remark: the formula starts with a ? ( <b>question mark</b> ). Examples: ?[@netto@] + [@btw@] ?[@total@]*10/100
<b>Belongs to</b>	<i>Read-only field. Indicates whether the property is a pool property or a property that is linked to a category. When linked to a category, the name of the category is mentioned in this field.</i>
<b>Index</b>	<input checked="" type="checkbox"/> Searchable <i>Property is searchable. The property is automatically available in the default search screen. It can be used in the definition of QUERY screens.</i> <i>This option is always combined with one of the radio buttons Normal, Fulltext or None.</i> <input type="checkbox"/> Searchable <i>The property is not available for the definition of search screens and also not available in the default search screen.</i> <input checked="" type="radio"/> Normal <i>Allows running an indexed search on the item using the advanced search windows.</i> <input checked="" type="radio"/> Fulltext <i>Only available when using an Oracle database. Interesting to allow full search on e.g. an abstract index field.</i> <input checked="" type="radio"/> None <i>Select this option to allow exceptional searches on the index. It is not the quickest way to search, but the items will be found.</i> Index to be created <i>Property index is ready to be created, but not yet available.</i> Index OK <i>Indexation is OK.</i> No index <i>There is no index for the property. It can only be found by using the full text search.</i>
<b>Type</b>	<i>Property type (String, number, currency, date, ...)</i>
<b>Max. length</b>	<i>Max. number of characters that can be introduced in this property.</i>
<b>Default value</b>	<i>Value that appears by default in the property.</i>
<b>Visible in Read-Only/Archive</b>	<input checked="" type="checkbox"/> The property is visible in the default routing archive screen and in the default read-only screen of the step detail. <input type="checkbox"/> The property is not visible in the default routing archive screen and in the default read-only screen of the step detail.

<b>Printable</b>	<input checked="" type="checkbox"/> The property is added to the standard 'PrintToExcel', Print reports. <input type="checkbox"/> The property is not added to the standard 'PrintToExcel', Print reports
<b>Edit Mask</b>	The edit mask applied when entering a value

### 1.2.2.2 Tab translation

This tab contains the translated labels of the property name and the tooltip that appears when the user puts the cursor on the field name.

If the DocRoom or Routing interface is presented in different languages, the property names and tooltips can be translated in the languages that are used.

When the web user selects another language, the label will then appear in the selected language (if the language labels are completed).

A tooltip appears when the user puts his/her cursor on the name of the property in the web interface.

If the translated label is not entered in the Translation fields, the Name of the property is used as label in the web interface.

Name	English	French	Dutch	German
Property				
Translation				

Tooltip	English	French	Dutch	German
Property				
Translation				

You can enter the translations in the language fields under the header *Name*.

You can enter the translations of the tooltips in the language fields under the header *Tooltip*.

### 1.2.2.3 Tab Categories

This tab shows an overview of all categories where the property is linked to (is used).

The screenshot shows a software interface with a toolbar at the top containing icons for Save, Save & Close, Edit, Filter, Refresh, and Close. Below the toolbar is a grid titled 'Categories'. The grid has columns for 'NAME' and 'TYPE'. A single row is visible, showing 'General Document' under 'NAME' and 'Document' under 'TYPE'. To the left of the grid is a sidebar with icons for Property, Translation, Categories, Screens, Notes, and Audit. A tip message in the grid area says: 'Tip: For adding categories: drag&drop categories from treeview into this grid'.

### 1.2.2.4 Tab Screens

This tab shows an overview of all screens in which the property is shown.

The screenshot shows a software interface with a toolbar at the top containing icons for Save, Save & Close, Edit, Filter, Refresh, and Close. Below the toolbar is a grid titled 'Screens'. The grid has columns for 'NAME', 'ITEM MODE', and 'SCREEN MODE'. A single row is visible, showing 'GeneralDocumentInsertScreen' under 'NAME', 'Writable' under 'ITEM MODE', and 'INSERTUPDATEDDETAIL' under 'SCREEN MODE'. To the left of the grid is a sidebar with icons for Property, Translation, Categories, Screens, Notes, and Audit. A tip message in the grid area says: 'Drag a column header here to group by that column'.

The columns show the following information:

Field name	Information
<b>Name</b>	Name of the screen in which the property is shown.
<b>Item mode</b>	Mode in which the property is shown in the screen.
<b>Screen mode</b>	Mode of the screen (query, result, subscription, tooltip, step detail, ...)

Put the cursor in the overview and click on the right mouse button to add, edit or delete a comment.

### 1.2.2.5 Tab Notes

Tab where administrators or developers can add notes about changes and configurations that were made on this level.

### 1.2.2.6 Tab Audit

This tab gives an overview of all modifications on this property.

USER	PROGRAM	ACTION	OBJECT	TYPE	DATE	DESCRIPTION
ARCO FERDY	Arco.ApplicationServer.Service	ADDLINK	115339	CATEGORY	2012-05-16 11:57:00	Linked property poolstring to category with id 115339
ARCO FERDY	Arco.ApplicationServer.Service	CREATE	0		2012-05-16 11:06:00	Created property poolstring

### 1.3 Property types

#### 1.3.1 Assignee

##### 1.3.1.1 Description

**Field where the end user can select one (assignee list) or more (assignee multi select list) users to whom a next step will be assigned.**

##### 1.3.1.2 Configuration

The screenshot shows the configuration of a property named 'Assignee'. The 'Type' is set to 'ASSIGNEE'. In the 'Index' section, 'Searchable' is checked. Under 'Options', 'Visible in Read-Only/Archive' and 'Printable' are checked. The 'Assignee' dropdown menu lists '\_DATABASE\ADMIN' and '\_DATABASE\T1'.

###### 1.3.1.2.1 Property parameters

Field name	Information
<b>Extract</b>	<p><input checked="" type="checkbox"/> <i>Users of lists and roles are extracted from the assignee list, i.e. each assignee can be selected separately by the user.</i></p> <p><input type="checkbox"/> <i>Users of lists and roles are not extracted from it, i.e. only complete roles can be selected. (Before Routing version 3.3b this was a parameter on application level)</i></p> <p><b>Remark:</b> in case Everyone is selected, this is not applicable</p>
<b>Radio</b>	<p><input checked="" type="checkbox"/> <i>The list items are presented as individual items with a radio button before them.</i></p> <p><input type="checkbox"/> <i>The list items are presented in a dropdown list.</i></p> <p><b>Remark:</b> If this option is combined with multi select, the radio buttons are replaced by check boxes.</p> <p><b>Remark:</b> in case Everyone is selected, this is not applicable</p>
<b>Multi select</b>	<p><input checked="" type="checkbox"/> <i>The end user can select more than one item out of the list.</i></p> <p><input type="checkbox"/> <i>Only one item of the list can be selected by the end user.</i></p>
<b>Everyone</b>	<p><input checked="" type="checkbox"/> <i>The user can select persons from the complete user list (synchronized users and database users).</i></p> <p><input type="checkbox"/> <i>The user can only select persons mentioned in the list of the</i></p>

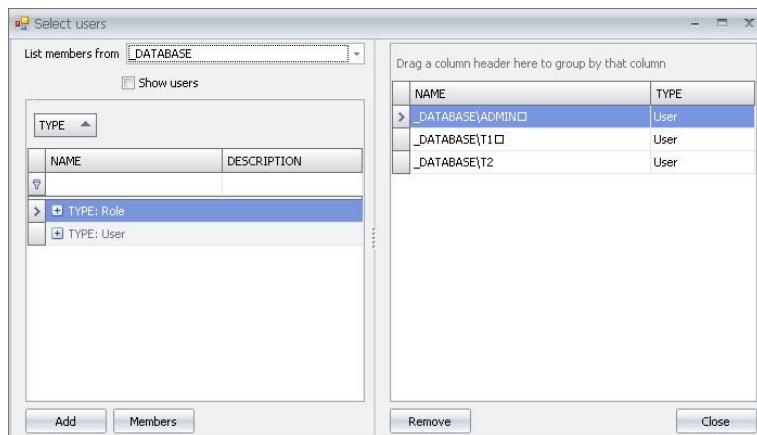
*assignee field.*

- Refresh on change**  *The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.*  
 *The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.*

### 1.3.1.2.2 Assignee

**In this field you can define the users, roles or groups that appear in this property. This field will disappear when you select the option Everyone.**

Click on the **Select** button in the field to select the users, roles and/or groups you want to show in this property. A selection screen will appear:



Select users, roles or groups in the left list and add them to the selected users at the right by clicking on the button **Add** below the list.

### 1.3.1.2.3 Output examples in the web interface

#### 1.3.1.2.3.1 Simple assignee list

Definition:

The screenshot shows a configuration panel for a field named "Assignee". On the left, there is a list of options: "Extract", "Radio buttons", "Multi select", "Everyone", and "Refresh on change". The "Everyone" option is selected. Below this, the "Assignee" field is displayed. It has a label "Assignee" and a dropdown menu containing four items: "ARCO\DEMO1", "ARCO\DEMO2", "ARCO\DEMO3", and "ARCO\DEMO4".

Results in:

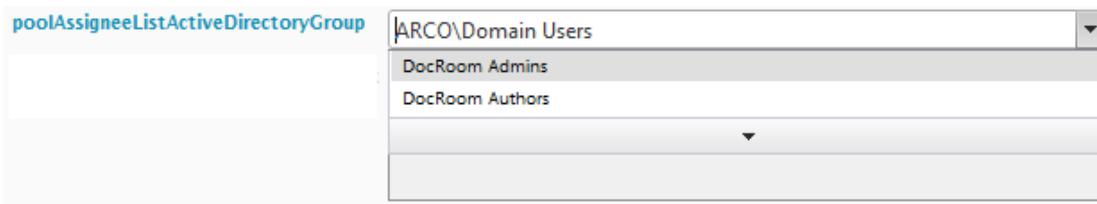
The screenshot shows a dropdown menu labeled "poolAssigneeList". The menu contains four items: "Demo1", "Demo2", "Demo3", and "Demo4". The item "Demo4" is currently selected. A red "X" icon is located at the bottom right of the dropdown menu.

#### 1.3.1.2.4 Assignee list with groups

Definition:

The screenshot shows a configuration panel for a field named "Assignee". On the left, there is a list of options: "Extract", "Radio buttons", "Multi select", "Everyone", and "Refresh on change". The "Everyone" option is selected. Below this, the "Assignee" field is displayed. It has a label "Assignee" and a dropdown menu containing two entries: "(Group) ARCO\DocRoom Admins" and "(Group) ARCO\DocRoom Authors".

Results in:



#### 1.3.1.2.4.1 Assignee list with extracted groups

Definition:

Extract  
 Radio buttons  
 Multi select  
 Everyone  
 Refresh on change

**Assignee**

(Group) ARCO\DocRoom Admins  
 (Group) ARCO\DocRoom Authors

Results in:

Bart De Prins  
 Christopher Gaens  
 Danny Bosschaerts  
 Demo1  
 DocRoom Admin  
 Ferdy Van den Broeck  
 Gie Schollaert  
 Kathleen Van de Weyer  
 Stefan De Prins  
 Administrator  
 Walter Vander Goten

After selection:

poolAssigneeListActiveDirectoryGroupE

Demo1

#### 1.3.1.2.4.2 Assignee list with extracted groups, multi select

Definition:

Extract

Checkboxes

Multi select

Everyone

Refresh on change

---

**Assignee**

Assignee	(Group) ARCO\DocRoom Admins (Group) ARCO\DocRoom Authors
----------	---

Results in:

poolAssigneeListActiveDirectoryGroupE

X

Selection list:

poolAssigneeListActiveDirectoryGroupE

Bart De Prins
Christopher Gaens
Danny Bosschaerts
Demo1
DocRoom Admin
Ferdy Van den Broeck
Gie Schollaert
Kathleen Van de Weyer
Stefan De Prins
Administrator
Walter Vander Goten

After selection of more assignees:

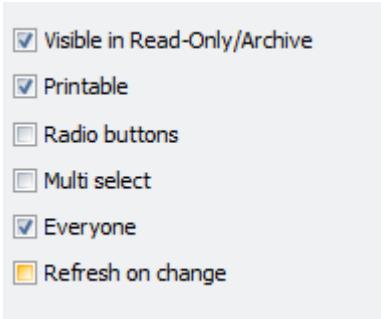
poolAssigneeListActiveDirectoryGroupE

DocRoom Admin
Demo1

X

#### 1.3.1.2.4.3 Everyone

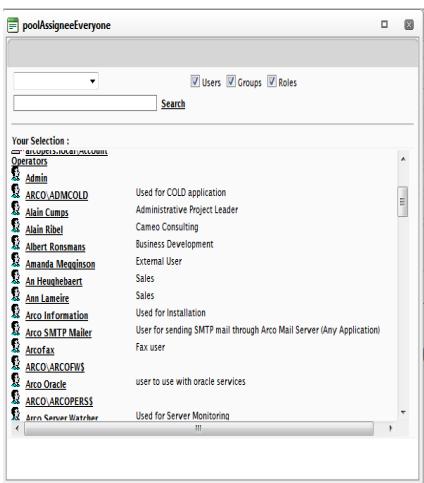
Definition:



Results in:



Clicking on gives the user selection box:



After selection of a user, you get



### 1.3.2 AutoNumber

#### 1.3.2.1 Description

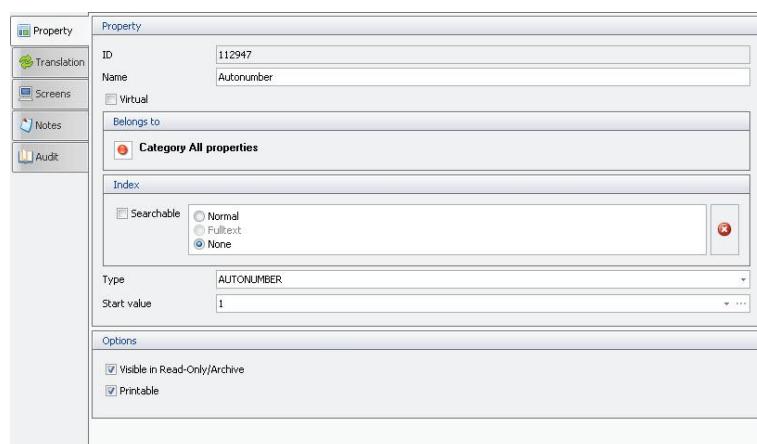
**Field where the number increases each time a new item (document, folder, dossier, workflow, ...) is created.**

This property can only be used in read-only.

The start value cannot be changed after the property has been used in a DocRoom object.

If the autonumber is defined as a pool property, assigned to more DocRoom categories, the number will increase each time an item of any of these categories is created.

#### 1.3.2.2 Configuration



##### 1.3.2.2.1 Property parameters

Field name	Information
Start value	<i>Value of the number the first time the autonumber field is used in DocRoom.</i>

#### 1.3.2.3 Output in the web interface

**Definition:**

ID	115287
Name	poolAutonumber
<input checked="" type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	AutoNumber
Start value	1
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive	
<input checked="" type="checkbox"/> Printable	

**Results in:****Autonumber**

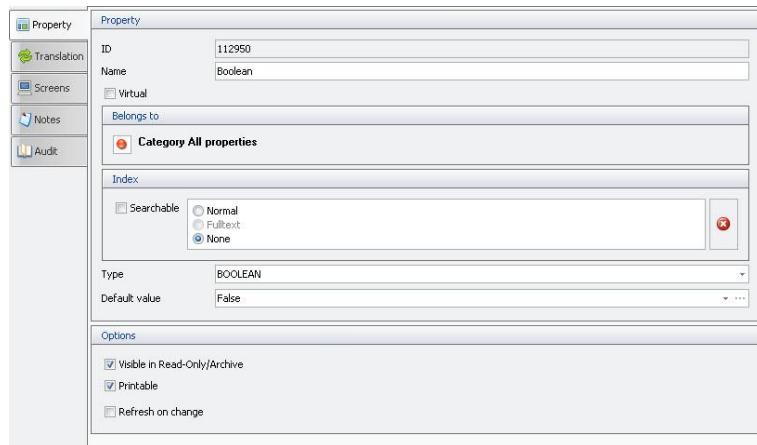
2

### 1.3.3 Boolean

#### 1.3.3.1 Description

Field where the user has the choice between true - false.

#### 1.3.3.1.1 Configuration



#### 1.3.3.1.2 Property parameters

Field name	Information
<b>Default value</b>	<p><i>Value that is shown by default in the field in the DocRoom web interface.</i></p> <p>Possible values: true or false.</p> <p><i>Remark:</i> if you want to have a Boolean option without a default value (only an empty field) to ensure that users must think about their choice, define a list field that has 3 values: an empty one, true and false.</p>

#### 1.3.3.2 Output in the web interface

**Definition:**

ID	115289
Name	poolBoolean
<input type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Boolean
Default value	False
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive	
<input checked="" type="checkbox"/> Printable	
<input type="checkbox"/> Refresh on change	

**Results in:****poolBoolean** Yes  No

### 1.3.4 CodeLookUp

#### 1.3.4.1 Description

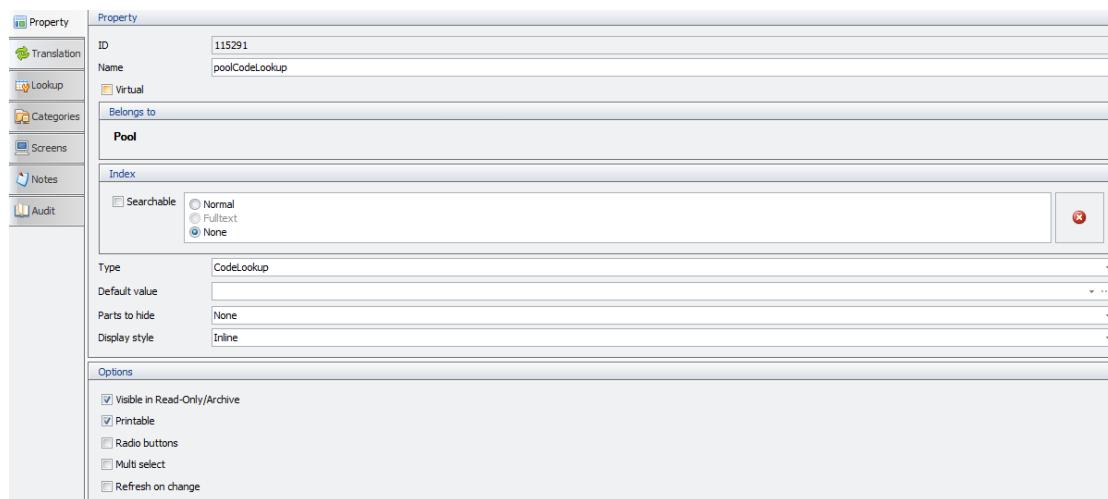
**Field to make a lookup possible using an .NET dll. This dll has to return an arraylist of a .net class.**

If the list of values for a lookup is not available in a database or you do not have direct access to it, the code lookup allows you to connect to any dataset from within your own .net code. The dataset can be made available through the use of an API, web service, database,

To create a code lookup, you have to define a class with public variables that hold the fields to be shown (only one when the lookup is defined as a dropdown list).

Create a function that returns an array list of this class.

#### 1.3.4.2 Configuration



##### 1.3.4.2.1 Property parameters and options

Field name	Information
<b>Default value</b>	<p>Possibility to enter a default value for the field. This value will appear as a standard value in the Web Interface.</p> <p>Make sure this default has the same layout has a correct entry in the Web interface.</p>
<b>Parts to hide</b>	<p><b>Remark:</b> These settings apply when rendering the property in <b>writable mode</b></p> <p><input checked="" type="checkbox"/> (Select all): all options below are checked</p> <p><input checked="" type="checkbox"/> AdvancedSearchBox: the property is rendered with a  button and a pop-up window to make a selection (only in combination with multi select option)</p> <p><input type="checkbox"/> AdvancedSearchBox: no popup window available</p> <p><input checked="" type="checkbox"/> SelectedBox: the selected values of the property are rendered in a table</p> <p><input type="checkbox"/> SelectedBox: no table is shown for the selected values</p> <p><input checked="" type="checkbox"/> DeleteIcon: an  icon is added to be able to delete entries in the table with selections, applicable if <input checked="" type="checkbox"/> SelectedBox is checked</p>

	<p><input type="checkbox"/> <i>DeleteIcon: no </i> is rendered. Deletion is not possible from the selected values.</p> <p>If no option is checked, 'None' is displayed in Doma Admin</p>
<b>Display Style</b>	<p><b>Remark:</b> These settings apply when rendering the property in <b>writable</b> mode</p> <p><b>Inline:</b> the property is rendered as a dropdown list</p> <p><b>Popup:</b> the property is rendered as a pop-up screen with a  button</p> <p><b>Both:</b> Inline and Popup are active</p>
<b>Radio buttons</b>	<p><b>Remark:</b> Only available when Display Style = <i>Inline</i>.</p>
<b>Checkboxes</b>	<p><b>Remark:</b> If this option is combined with multi select, Radio buttons will change into Checkboxes.</p> <p><input checked="" type="checkbox"/> The list items are presented as individual items with a radio button before them. If checked, the number of items per row needs to be entered</p> <p><input type="checkbox"/> The list items are presented in a dropdown list.</p>
<b>Multi select</b>	<p><input checked="" type="checkbox"/> The end user can select more than one item.</p> <p><input type="checkbox"/> Only one item can be selected by the end user.</p>
<b>Refresh on change</b>	<p><input checked="" type="checkbox"/> The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.</p> <p><input type="checkbox"/> The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.</p>

### 1.3.4.2.2 Tab Lookup

The screenshot shows the 'Lookup' tab configuration for a 'CodeLookupClass' property. The top bar includes standard save, close, and lookup buttons. The main configuration area has the following sections:

- Property:** DLL: CodeLookupClass, Class name: CodeLookupClass.CountryLookup, Method: GetCountries.
- Translation:** None.
- Lookup:** Records per page: 20, Auto load: checked, Open maximized: checked.
- Categories:** None.
- Screens:** None.
- Notes:** None.
- Audit:** None.

The 'Fields' section displays a table of fields:

FIELD	FIELD TYPE	HEADING	SELECTION	DISPLAY
ISO3166_1_2LetterCode	FIELD	Country Code	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
FormatName	FIELD	Formal Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CommonName	FIELD	Common Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CurrencyCode	FIELD	Currency Code	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CurrencyName	FIELD	Currency Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow

#### 1.3.4.2.2.1 Parameters of the .NET dll

Field name	Information
<b>DLL</b>	<i>The name of the .Net dll that implements the code lookup, without the .dll extension.</i>
<b>Class Name</b>	<i>The name of the class method to be used.</i>
<b>Method</b>	<i>The name of the method to be called.</i>
<b>Records per page</b>	<i>The number of records shown in the pop-up at a time.</i>
<b>Auto Load</b>	<input checked="" type="checkbox"/> Not applicable <input type="checkbox"/> Not applicable
<b>Open maximized</b>	<input checked="" type="checkbox"/> The popup window opens in a maximized screen (if applicable) <input type="checkbox"/> The popup window opens in a dynamically calculated size (if applicable)

#### 1.3.4.2.2.2 Parameter mapping

The parameter mapping is applicable if het method being called in the .net class requires a parameter.

This zone defines the parameter mapping between DocRoom and the method of the external class.

Click on 'New parameter' in order to add a new parameter field

Field name	Information
<b>NAME</b>	<i>Name of the parameter</i>
<b>VALUE</b>	<i>The value of the parameter when calling the method.</i> <b>Remark:</b> you can user here references to other properties using the <code>[@prop_name@]</code> syntax.
<b>TYPE</b>	<i>STRING : for parameters of type string NUMBER: for parameter of type Integer/Float</i>
<b>SEARCHABLE</b>	<i>Not applicable</i>

#### 1.3.4.2.2.3 Fields mapping

The Fields section defines the fields of the array list, returned by the .net method, which will be shown in the selected values.

Click on 'New parameter' in order to add a new parameter field

Field name	Information
<b>FIELD</b>	<i>The name of the field as returned by the array list. Make sure that this name matches exactly to the name of the field as defined in the .net array list.</i>
<b>FIELD TYPE</b>	<i>FIELD : only one that is applicable PROPERTY: not applicable METHOD: not applicable</i>

	<i>RETURN: not applicable</i>
<b>HEADING</b>	<i>The name for the field rendered In the web interface</i>
<b>SELECTION</b>	<p><b>Remark:</b> Only one field can be checked as 'selected'</p> <p><input checked="" type="checkbox"/> this field is the key field of the list</p> <p><input type="checkbox"/> no key field</p>
<b>DISPLAY</b>	<p><i>PopupWindow: the field is shown in the popup window (if applicable)</i></p> <p><i>DetailWindow: the field is shown in the detail table with selected values(if applicable)</i></p> <p><i>TooltipWindow: the field is shown in the tooltip window of the table with selected values (if applicable)</i></p> <p><i>(Select All): all of the above apply</i></p>

#### 1.3.4.3 Output in the web interface

The examples shown below are based on a .net dll 'CodelookupClass'. Example code is added in appendix 5.

Dll name: CodeLookupClass

Class name: CodeLookupClass.CountryLookup

Methods:

- GetCountries(): reruns a list of countries.
- GetCountryWithStartParameter( StartsWith As string ): returns list of countries of which the name starts with the given parameter.
- 

Returned array list: a list of country objects with fields

- CommonName
- FormalName
- Type
- SubType
- Sovereignty
- Capital
- CurrencyCode
- CurrencyName
- TelephoneCode
- ISO3166\_1\_2LetterCode
- ISO3166\_1\_3LetterCode
- ISO3166\_1\_Number
- IANA\_CountryCode

## A lookup without parameter

Screenshot of the Doma 6 application interface showing the configuration of a 'Country.Lookup' lookup component.

**Properties:**

- DLL: CodeLookupClass
- Class name: CodeLookupClass.Country.Lookup
- Method: GetCountries
- Records per page: 20
- Auto load:
- Open maximized:

**Parameters:**

NAME	VALUE	TYPE	SEARCHABLE

**Fields:**

FIELD	FIELD TYPE	HEADING	SELECTION	DISPLAY
ISO3166_1_2LetterCode	FIELD	Country Code	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
FormalName	FIELD	Formal Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CommonName	FIELD	Common Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CurrencyCode	FIELD	Currency Code	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CurrencyName	FIELD	Currency Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow

## Definition – Inline – single select

**Parts to hide:** None

**Display style:** Inline

**Options:**

- Visible in Read-Only/Archive
- Printable
- Radio buttons
- Multi select

## Results in:

Writable:

poolCodeLookup

- AF, Islamic State of Afghanistan, Afghanistan, AFN, Afghani
- AL, Republic of Albania, Albania, ALL, Lek
- DZ, People's Democratic Republic of Algeria, Algeria, DZD, Dinar
- AD, Principality of Andorra, Andorra, EUR, Euro
- AO, Republic of Angola, Angola, AOA, Kwanza
- AG, Antigua and Barbuda, XCD, Dollar
- AR, Argentine Republic, Argentina, ARS, Peso
- AM, Republic of Armenia, Armenia, AMD, Dram
- AU, Commonwealth of Australia, Australia, AUD, Dollar
- AT, Republic of Austria, Austria, EUR, Euro
- AZ, Republic of Azerbaijan, Azerbaijan, AZN, Manat
- BS, Commonwealth of The Bahamas, Bahamas, The, BSD, Dollar
- BH, Kingdom of Bahrain, Bahrain, BHD, Dinar
- BD, People's Republic of Bangladesh, Bangladesh, BDT, Taka
- BB, Barbados, BBD, Dollar
- BY, Republic of Belarus, Belarus, BYR, Ruble
- BE, Kingdom of Belgium, Belgium, EUR, Euro
- BZ, Belize, BZD, Dollar
- BJ, Republic of Benin, Benin, XOF, Franc
- BT, Kingdom of Bhutan, Bhutan, BTN, Ngultrum

After selection:

poolCodeLookup

BS, Commonwealth of The Bahamas, Bahamas, The, BSD, Dollar

In read-only screen:

poolCodeLookup	Country Code	Formal Name	Common Name	Currency Code	Currency Name
	AR	Argentine Republic	Argentina	ARS	Peso

### Definition – popup – single select

Parts to hide	<input type="text" value="None"/>
Display style	<input type="text" value="Popup"/>
<b>Options</b>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Radio buttons <input type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change	

### Results in:

Writable:

poolCodeLookup

X

After clicking the  button

### After selection:

poolCodeLookup  AT, Republic of Austria, Austria, EUR, Euro 

In read-only screen:

poolCodeLookup	Country Code	Formal Name	Common Name	Currency Code	Currency Name
	AT	Republic of Austria	Austria	EUR	Euro

### Definition – inline and popup – single select

Default value	<input type="text"/>
Parts to hide	<input type="text"/> None
Display style	<input type="text"/> Both
<b>Options</b>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Radio buttons <input type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change	

### Results in:

Writable:

poolCodeLookup

### Definition – inline – single select - radio buttons

Parts to hide	<input type="text"/> None
Display style	<input type="text"/> Inline
<b>Options</b>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input checked="" type="checkbox"/> Radio buttons      Number of items per row <input type="text"/> 4 <input type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change	

### Results in:

Writable:

poolCodeLookup

<input type="radio"/> AF, Islamic State of Afghanistan, Afghanistan, AFN, Afghani	<input type="radio"/> AL, Republic of Albania, Albania, ALL, Lek	<input type="radio"/> DZ, People's Democratic Republic of Algeria, Algeria, DZD, Dinar	<input type="radio"/> AD, Principality of Andorra, Andorra, EUR, Euro
<input type="radio"/> AO, Republic of Angola, Angola, AOA, Kwanza	<input type="radio"/> AG, , Antigua and Barbuda, XCD, Dollar	<input type="radio"/> AR, Argentine Republic, Argentina, ARS, Peso	<input type="radio"/> AM, Republic of Armenia, Armenia, AMD, Dram
<input type="radio"/> AU, Commonwealth of Australia, Australia, AUD, Dollar	<input type="radio"/> AT, Republic of Austria, Austria, EUR, Euro	<input type="radio"/> AZ, Republic of Azerbaijan, Azerbaijan, AZN, Manat	<input type="radio"/> BS, Commonwealth of The Bahamas, Bahamas, The, BSD, Dollar
<input type="radio"/> BH, Kingdom of Bahrain, Bahrain, BHD, Dinar	<input type="radio"/> BD, People's Republic of Bangladesh, Bangladesh, BDT, Taka	<input type="radio"/> BB, , Barbados, BBD, Dollar	<input type="radio"/> BY, Republic of Belarus, Belarus, BYR, Ruble
<input type="radio"/> BE, Kingdom of Belgium, Belgium, EUR, Euro	<input type="radio"/> BZ, , Belize, BZD, Dollar	<input type="radio"/> BJ, Republic of Benin, Benin, XOF, Franc	<input type="radio"/> BT, Kingdom of Bhutan, Bhutan, BTN, Ngultrum
<input type="radio"/> BO, Republic of Bolivia, Bolivia, BOB, Boliviano	<input type="radio"/> BA, , Bosnia and Herzegovina, BAM, Marka	<input type="radio"/> BW, Republic of Botswana, Botswana, BWP, Pula	<input type="radio"/> BR, Federative Republic of Brazil, Brazil, BRL, Real

### Definition Inline – multi select

Parts to hide	<input type="text" value="None"/>
Display style	<input type="text" value="Inline"/>
<hr/>	
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Checkboxes <input checked="" type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change	

### Results in:

Writable:

poolCodeLookup

	Country Code	Formal Name	Common Name	Currency Code	Currency Name	X
						X

After selection:

poolCodeLookup

	Country Code	Formal Name	Common Name	Currency Code	Currency Name	X
	BB	Barbados, BBD, Dollar	Barbados	BB	Dollar	X
	AU	Commonwealth of Australia, Australia, AUD, Dollar	Australia	AUD	Dollar	X

Deleting a selected option can be done with the X button

In read-only screen:

poolCodeLookup

	Country Code	Formal Name	Common Name	Currency Code	Currency Name
	BB	Barbados, BBD, Dollar	Barbados	BB	Dollar
	AU	Commonwealth of Australia, Australia, AUD, Dollar	Australia	AUD	Dollar

### Definition Inline – multi select – Check boxes

Parts to hide	None
Display style	Inline
<b>Options</b>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive	
<input checked="" type="checkbox"/> Printable	
<input checked="" type="checkbox"/> Checkboxes	Number of items per row <input type="text" value="4"/>
<input checked="" type="checkbox"/> Multi select	
<input type="checkbox"/> Refresh on change	

### Results in:

#### Writable:

poolCodeLookup	<input type="checkbox"/> AF, Islamic State of Afghanistan, AFG, Afghani	<input type="checkbox"/> AL, Republic of Albania, Albania, ALL, Lek	<input type="checkbox"/> DZ, People's Democratic Republic of Algeria, Algeria, DZD, Dinar	<input type="checkbox"/> AD, Principality of Andorra, Andorra, EUR, Euro
	<input type="checkbox"/> AO, Republic of Angola, Angola, AOA, Kwanza	<input type="checkbox"/> AG, Antigua and Barbuda, XCD, Dollar	<input type="checkbox"/> AR, Argentine Republic, Argentina, ARS, Peso	<input type="checkbox"/> AM, Republic of Armenia, Armenia, AMD, Dram
	<input checked="" type="checkbox"/> AU, Commonwealth of Australia, Australia, AUD, Dollar	<input type="checkbox"/> AT, Republic of Austria, Austria, EUR, Euro	<input type="checkbox"/> AZ, Republic of Azerbaijan, Azerbaijan, AZN, Manat	<input type="checkbox"/> BS, Commonwealth of The Bahamas, Bahamas, The, BSD, Dollar
	<input type="checkbox"/> BH, Kingdom of Bahrain, Bahrain, BHD, Dinar	<input type="checkbox"/> BD, People's Republic of Bangladesh, BDT, Taka	<input checked="" type="checkbox"/> BB, Barbados, BBD, Dollar	<input type="checkbox"/> BY, Republic of Belarus, Belarus, BYR, Ruble

## Definition Popup – multi select

Parts to hide	None
Display style	Popup
<hr/>	
Options	

## Results in:

Writable:

poolCodeLookup	<input type="text"/>	
	<input type="text"/>	 

After clicking the  button

After selection:



In read-only screen:

poolCodeLookup	Country Code	Formal Name	Common Name	Currency Code	Currency Name
	AM	Republic of Armenia	Armenia	AMD	Dram
	BY	Republic of Belarus	Belarus	BYR	Ruble
	BJ	Republic of Benin	Benin	XOF	Franc

**Definition Popup and inline – multi select**

Parts to hide	<input type="text" value="None"/>
Display style	<input type="text" value="Both"/>
<hr/>	
<b>Options</b>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive	
<input checked="" type="checkbox"/> Printable	
<input type="checkbox"/> Checkboxes	
<input checked="" type="checkbox"/> Multi select	
<input type="checkbox"/> Refresh on change	

**Results in:**

Writable:

poolCodeLookup

Country Code	Formal Name	Common Name	Currency Code	Currency Name	

## A Code lookup with parameter

Screenshot of the Doma 6 application showing the configuration of a CodeLookupClass. The interface includes sections for DLL properties, Translation, Method, and various lookup parameters like Categories, Screens, Notes, and Audit.

**DLL**

Property	DLL	CodeLookupClass
Translation	Class name	CodeLookupClass.CountryLookup
Lookup	Method	GetCountryWithStartParameter
Categories	Records per page	20
Screens	<input checked="" type="checkbox"/> Auto load	
Notes	<input checked="" type="checkbox"/> Open maximized	
Audit	Parameters	

Drag a column header here to group by that column

NAME	VALUE	TYPE	SEARCHABLE
StartString	BE	STRING	<input type="checkbox"/>

Fields

Drag a column header here to group by that column

FIELD	FIELD TYPE	HEADING	SELECTION	DISPLAY
> ISO3166_1_2LetterCode	FIELD	Country Code	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
FormalName	FIELD	Formal Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CommonName	FIELD	Common Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CurrencyCode	FIELD	Currency Code	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
CurrencyName	FIELD	Currency Name	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow

## Definition inline – singles select:

Configuration settings for a single-select dropdown:

- Default value:
- Parts to hide: None
- Display style: Inline

**Options**

- Visible in Read-Only/Archive
- Printable
- Radio buttons
- Multi select
- Refresh on change

## Results in:

Writable:

Screenshot showing the results of a code lookup with a parameter. The input field contains "BE, Kingdom of Belgium". The dropdown menu lists several options, with "BE, Kingdom of Belgium, Belgium, EUR, Euro" highlighted.

poolCodeLookupWithParameter	BE, Kingdom of Belgium  Belgium, EUR, Euro
	BY, Republic of Belarus, Belarus, BYR, Ruble
	BE, Kingdom of Belgium, Belgium, EUR, Euro
	BZ, Belize, BZD, Dollar
	BJ, Republic of Benin, Benin, XOF, Franc
	BM, Bermuda, BMD, Dollar

### Definition with other property value as parameter:

Drag a column header here to group by that column			
NAME	VALUE	▲ TYPE	SEARCHABLE
> StartString	[@poolstring@]	STRING	<input type="checkbox"/>

### Results in:

If no value entered in poolstring:

The screenshot shows a search interface with two main sections. On the left, there is a text input field labeled "poolstring" containing the placeholder "[@poolstring@]". To the right of this is a dropdown menu labeled "poolCodeLookupWithParameter". The dropdown contains a long list of country codes and their corresponding names and currencies, such as AF, Islamic State of Afghanistan, Afghanistan, AFN, Afghani; AL, Republic of Albania, Albania, ALL, Lek; DZ, People's Democratic Republic of Algeria, Algeria, DZD, Dinar; AD, Principality of Andorra, Andorra, EUR, Euro; AO, Republic of Angola, Angola, AOA, Kwanza; AG, Antigua and Barbuda, XCD, Dollar; AR, Argentine Republic, Argentina, ARS, Peso; AM, Republic of Armenia, Armenia, AMD, Dram; AU, Commonwealth of Australia, Australia, AUD, Dollar; AT, Republic of Austria, Austria, EUR, Euro; AZ, Republic of Azerbaijan, Azerbaijan, AZN, Manat; BS, Commonwealth of The Bahamas, Bahamas, The, BSD, Dollar; BH, Kingdom of Bahrain, Bahrain, BHD, Dinar; BD, People's Republic of Bangladesh, Bangladesh, BDT, Taka; BB, Barbados, BBD, Dollar; BY, Republic of Belarus, Belarus, BYR, Ruble; BE, Kingdom of Belgium, Belgium, EUR, Euro; BZ, Belize, BZD, Dollar; BJ, Republic of Benin, Benin, XOF, Franc; BT, Kingdom of Bhutan, Bhutan, BTN, Ngultrum.

With value entered in the poolstring filter:

The screenshot shows the same search interface as above, but with a different input value. In the "poolstring" input field, the letter "ar" is typed. The dropdown menu now displays a filtered list of results starting with "ar", specifically: AR, Argentine Republic, Argentina, ARS, Peso; AM, Republic of Armenia, Armenia, AMD, Dram; AW, Aruba, AWG, Guilder.

### 1.3.5 Currency

#### 1.3.5.1 Description

Field where the user can only add a numeric value.  
Next to the field the user can select the currency that is used.

#### 1.3.5.2 Configuration

The screenshot shows the 'Property' configuration screen for a 'Currency' field. The left sidebar includes icons for Translation, Categories, Screens, Notes, and Audit. The main panel has sections for 'Property', 'Index', 'Options', and 'Currency'. In the 'Property' section, the ID is 115293 and the name is 'poolCurrency'. The 'Type' is set to 'Currency'. Under 'Options', 'Visible in Read-Only/Archive' and 'Printable' are checked. In the 'Currency' section, a list of currencies is shown with € at the top.

##### 1.3.5.2.1 Property parameters

Field name	Information
<b>Min. value</b>	<i>The amount entered in the field must be higher than this value</i>
<b>Max. value</b>	<i>The amount entered in the field must be lower than this value</i>
<b>Default value</b>	<i>Possibility to enter a default value for the field. This value will appear as a standard value in the Web Interface.</i>
<b>Currency</b>	<p><i>Enter here the currencies that must be available in the list. The currency on top of the list is shown as default currency in the web interface.</i></p> <p><i>To add a currency: position the cursor in the list, and then enter a value. Press the [Enter] key. Then enter a new value.</i></p> <p><b>Remark:</b> if only one currency entered in the list, this will be automatically the default currency</p>

#### 1.3.5.3 Output in the web interface

The above configuration results into

poolCurrency	125,00	€ ▾
		€
		\$
		£
		DKK

Results into

poolCurrency	125,00 €
--------------	----------

If only one currency listed:

Currency	€
Currency	

The result will be

poolCurrency		€ ▾
--------------	--	-----

### 1.3.6 Date

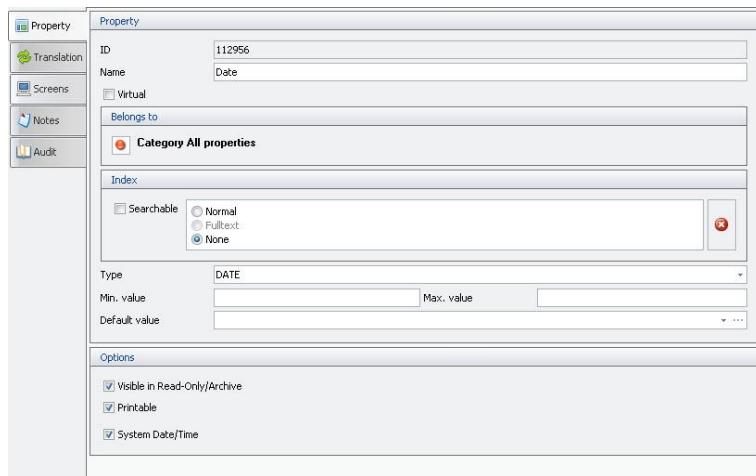
#### 1.3.6.1 Description

Field where the user can add a date.

Default value can be the system date or another date.

In the Web Interface, the user can pick a date out of a calendar by clicking on the calendar icon next to the field.

#### 1.3.6.2 Configuration



##### 1.3.6.2.1 Property parameters

Field name	Information
<b>Min. value</b>	<i>The date entered in the field cannot appear before the date defined in this field.</i>
<b>Max. value</b>	<i>The date entered in the field cannot appear after the date defined in this field.</i>
<b>Default value</b>	<i>Possibility to enter a default value for the field. This value will appear as a standard value in the Web Interface.</i>
<b>System Date/Time</b>	<i>The field will be initialized with the system date at creation of the object</i>

### 1.3.6.3 Output in the web interface

**Definition:**

Property			
ID	115295		
Name	PoolDate		
<input type="checkbox"/> Virtual			
Belongs to			
Pool			
Index			
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None		
Type	Date		
Min. value	01/01/2012	Max. value	31/12/2025
Default value			
Options			
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input type="checkbox"/> Printable <input checked="" type="checkbox"/> System Date/Time			

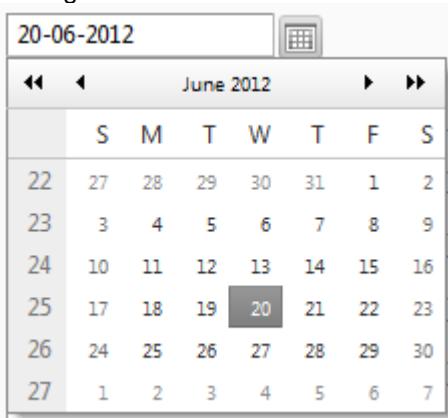
### Results in:

PoolDate

20-06-2012



Clicking on the button results in a date picker



When entering an invalid date, an error message is generated and the object cannot be saved/released.

PoolDate

01-01-2000

PoolDate must be between 01-01-2012 and 31-12-2025

### 1.3.7 DateTime

#### 1.3.7.1 Description

Field where the user can add a date and the time.

Default value can be the system date and time or another date and time.

In the Web Interface, the user can pick a date and time out of a calendar by clicking on the calendar icon and/or the time icon next to the field.

### 1.3.7.1.1.1 Configuration

### 1.3.7.1.2 Property parameters

Field name	Information
<b>Min. value</b>	<i>The date entered in the field cannot appear before the date defined in this field.</i>
<b>Max. value</b>	<i>The date entered in the field cannot appear after the date defined in this field.</i>
<b>Default value</b>	<i>Possibility to enter a default value for the field. This value will appear as a standard value in the Web Interface.</i>
<b>System Date/Time</b>	<i>The field will be initialized with the system date and time at creation of the object</i>

### 1.3.7.2 Output in the web interface

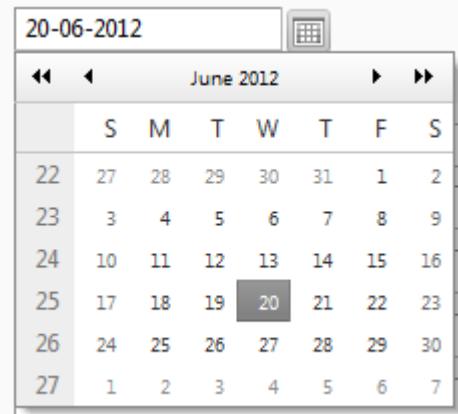
**Definition:**

ID	115297
Name	poolDateTime
<input type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	DateTime
Min. value	<input type="text"/>
Max. value	<input type="text"/>
Default value	2012-01-01 00:00:00
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> System Date/Time	

### Results in:

poolDateTime	01-01-2012 00:00:00		
--------------	---------------------	--	--

Clicking on the button results in a date picker



Clicking on the button results in a time picker

01-01-2012 00:00:00		
Select a time		
12:00 AM	1:00 AM	2:00 AM
3:00 AM	4:00 AM	5:00 AM
6:00 AM	7:00 AM	8:00 AM
9:00 AM	10:00 AM	11:00 AM
12:00 PM	1:00 PM	2:00 PM
3:00 PM	4:00 PM	5:00 PM
6:00 PM	7:00 PM	8:00 PM
9:00 PM	10:00 PM	11:00 PM

### 1.3.8 Decimal

#### 1.3.8.1 Description

Field in which the user can insert a decimal value.

#### 1.3.8.2 Configuration

The screenshot shows the 'Property' configuration screen. On the left is a sidebar with icons for Property, Translation, Screens, Notes, and Audit. The main area is divided into sections: 'Property' (ID: 112962, Name: Decimal value, Virtual checked, Belongs to Category All properties), 'Index' (Searchable: Normal, Fulltext, None selected), 'Type' (Type: DECIMAL), 'Options' (Visible in Read-Only/Archive checked, Printable checked).

##### 1.3.8.2.1 Property parameters

Field name	Information
<b>Min. value</b>	<i>The value entered in the field cannot be lower than the value defined in this field.</i>
<b>Max. value</b>	<i>The value entered in the field cannot be higher than the value defined in this field.</i>
<b>Default value</b>	<i>Possibility to enter a default value for the field. This value will appear as a standard value in the Web Interface.</i>

#### 1.3.8.3 Output in the web interface

**Definition:**

<b>Property</b>			
ID	115299		
Name	poolDecimal		
<input type="checkbox"/> Virtual			
<b>Belongs to</b>			
<b>Pool</b>			
<b>Index</b>			
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None		
Type	Decimal		
Min. value	0.01	Max. value	99,99
Default value	45.88		
<b>Options</b>			
<input checked="" type="checkbox"/> Visible in Read-Only/Archive			
<input checked="" type="checkbox"/> Printable			

**Results in:**

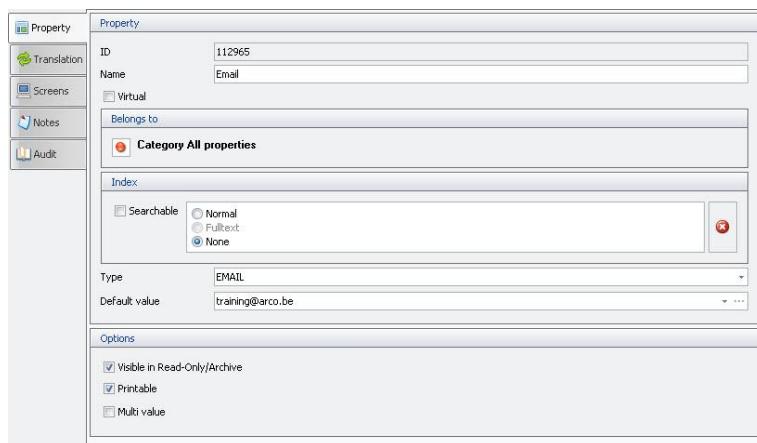
poolDecimal	45,88
-------------	-------

### 1.3.9 Email

#### 1.3.9.1 Description

Field where the end user can add an email address.  
There will be a check on the presence of the symbol @ and of the . [extension].

#### 1.3.9.2 Configuration



##### 1.3.9.2.1 Property parameters

Field name	Information
<b>Default value</b>	<i>Value that is shown by default in the field in the Doma web interface.</i>
<b>Multi value</b>	<input checked="" type="checkbox"/> Allows the user to enter multiple email addresses in this one field. All words entered on one line (delimiter = [enter]) will be considered as one value. <input type="checkbox"/> Only one Email address can be entered.

##### 1.3.9.2.2 Output in the web interface

**Definition:**

ID	115301
Name	poolEmail
<input type="checkbox"/> Virtual	
<b>Belongs to</b>	
<b>Pool</b>	
<b>Index</b>	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	EMail
Default value	Info@arco.be
<b>Options</b>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive	
<input checked="" type="checkbox"/> Printable	
<input checked="" type="checkbox"/> Multi value	

**Results in:**

poolEmail	Info@arco.be
-----------	--------------

Entering an invalid email address leads to

poolEmail	Info@arco.be InvalidAdress.com	poolEmail is not a valid e-mail format.
-----------	-----------------------------------	---

### 1.3.10 ExternalLookup

#### 1.3.10.1 Description

Field to make a lookup possible using an external URL

This property allows integrating an existing lookup page.

#### 1.3.11 Configuration

ID	115303
Name	poolExternalLookup
<input type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	ExternalLookup
Default value	
Parts to hide	None
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Radio buttons <input type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change	
External lookup	
URL	http://armpc52:800/DocroomSQL2012/custom/SelectSalesPersonExample.aspx

### 1.3.11.1 Property parameters

Field name	Information
<b>Default value</b>	<i>Value that is shown by default in the field in the Doma web interface.</i>
<b>Parts to hide</b>	<p><b>Remark:</b> These settings apply when rendering the property in <b>writable mode</b></p> <p><input checked="" type="checkbox"/> (Select all): all options below are checked</p> <p><input checked="" type="checkbox"/> AdvancedSearchBox: the property is rendered with a  button and a pop-up window to make a selection (only in combination with multi select option)</p> <p><input type="checkbox"/> AdvancedSearchBox: no popup window available</p> <p><input checked="" type="checkbox"/> SelectedBox: the selected values of the property are rendered in a table</p> <p><input type="checkbox"/> SelectedBox: no table is shown for the selected values</p> <p><input checked="" type="checkbox"/> DeleteIcon: an  icon is added to be able to delete entries in the table with selections, applicable if <input checked="" type="checkbox"/> SelectedBox is checked</p> <p><input type="checkbox"/> DeleteIcon: no  is rendered. Deletion is not possible from the selected values.</p> <p>If no option is checked, 'None' is displayed in DomaAdmin</p>
<b>Radio buttons</b>	Not applicable
<b>Checkboxes</b>	
<b>Refresh on change</b>	<p><input checked="" type="checkbox"/> The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.</p> <p><input type="checkbox"/> The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.</p>
<b>URL</b>	The URL being called when selecting a value. This URL must return a selected value

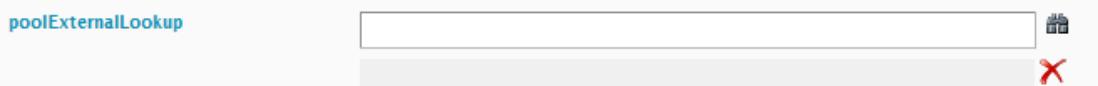
### 1.3.12 Output in the web interface

The code for the URL's called in the examples below is added as appendix 5.

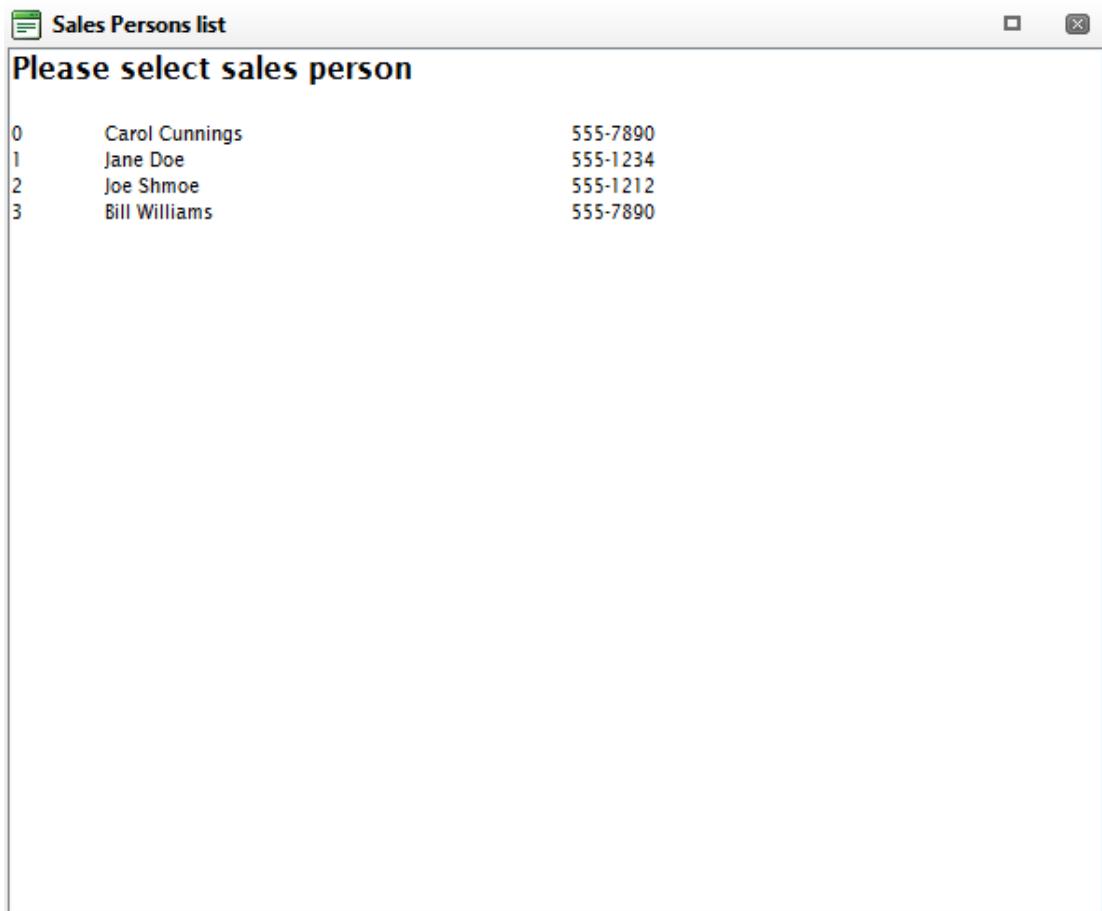
#### Definition: a single select external code lookup

ID: 115303  
Name: poolExternalLookup  
 Virtual  
Belongs to Pool  
Index  
 Searchable  Normal  Fulltext  None  
Type: ExternalLookup  
Default value:  
Parts to hide: None  
Options  
 Visible in Read-Only/Archive  
 Printable  
 Radio buttons  
 Multi select  
 Refresh on change  
External lookup  
URL: http://armepc52:800/DocroomSQL2012/custom/SelectSalesPersonExample.aspx

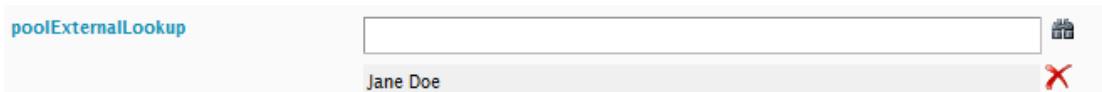
### Results in:



Clicking on the Search button opens the external screen:



When selecting an item, the lookup screen closes and the selected value is entered in the field:



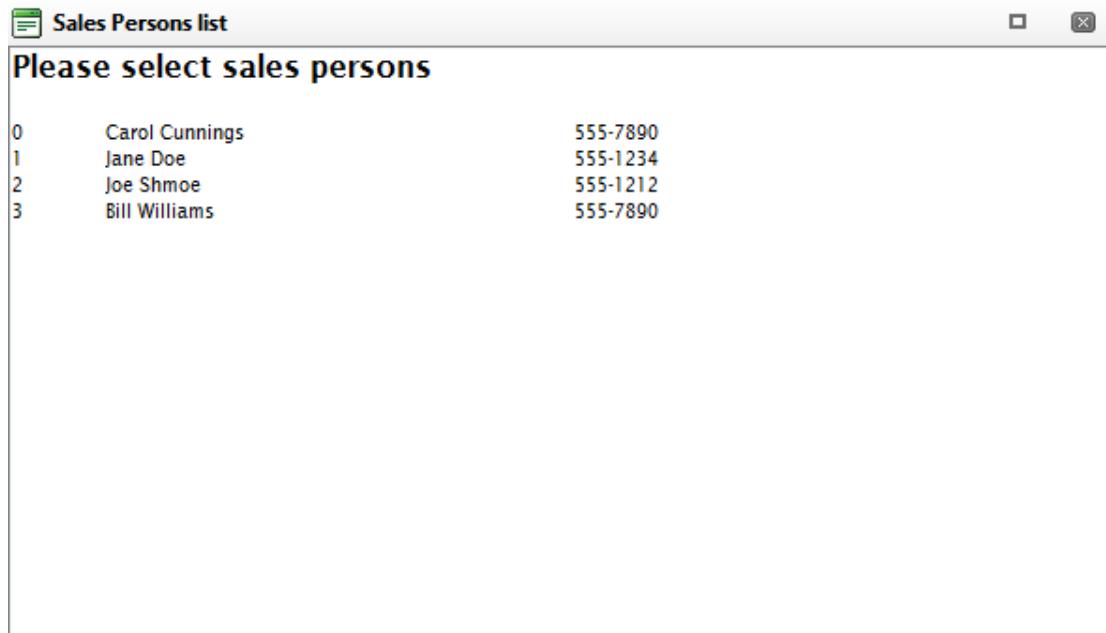
### Definition: a multi select external code lookup

ID	116491
Name	poolExternalLookupMultiSelect
<input type="checkbox"/> Virtual	
<u>Belongs to</u>	
Pool	
<u>Index</u>	
<input checked="" type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	ExternalLookup
Default value	
Parts to hide	None
<u>Options</u>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Checkboxes <input checked="" type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change	
<u>External lookup</u>	
URL	<a href="http://armepc52:800/DocroomSQL2012/custom&gt;SelectSalesPersonExampleMulti.aspx">http://armepc52:800/DocroomSQL2012/custom&gt;SelectSalesPersonExampleMulti.aspx</a>

### Results in:

poolExternalLookupMultiSelect	<input type="button" value="Search"/> <div style="border: 1px solid #ccc; padding: 2px; margin-top: 5px;"> </div>
-------------------------------	---

Clicking on the Search button opens the external screen:



When selecting items in the lookup, the selected values are added to the field:



### 1.3.13 Hidden

#### 1.3.13.1 Description

Field to be used as help field. This field will not be shown in the web interface, but can be used in the validation scripts as a work field

#### 1.3.13.2 Configuration

ID	115275
Name	poolHidden
<input type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Hidden
Default value	HiddenField
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable	

#### 1.3.13.2.1 Property parameters

Field name	Information
Default value	<b>Default Value when creating the object.</b>
Visible in Read-Only archive	<b>Not applicable</b>
Printable	<b>Not applicable</b>

#### 1.3.13.3 Output in the web interface

Hidden fields are not shown.

### 1.3.14 Html

#### 1.3.14.1 Description

**This property is only available to ensure backward compatibility with previous versions.**

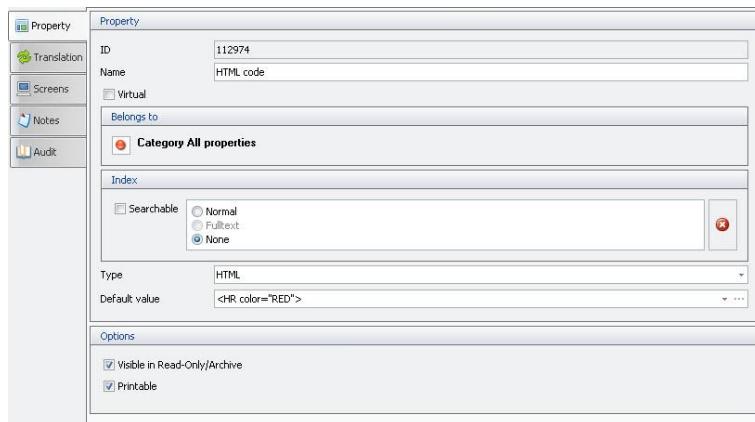
**Do not use it in version 6. Use the HTML screen item instead.**

Field where you can enter HTML code. This HTML code will be added “as is” to the screen at the location where the field is added in the screen definition.

In Read only mode, it will be represented according to the code.

This field can be used to adapt the lay-out of the screen in the Web Interface.

#### 1.3.14.2 Configuration



#### 1.3.14.2.1 Property parameters

Field name	Information
<b>Max. length</b>	<i>A maximal number of possible characters is indicated. For this property type, it cannot be changed.</i>
<b>Default value</b>	<i>Enter here the html code for the field.</i>

#### 1.3.14.3 Output in the web interface

**Definition:**

ID	115277
Name	poolHTML
<input type="checkbox"/> Virtual	
Belongs to	
Pool	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	HTML
Default value	<b><a href="http://www.arco.be"><font color="Blue" size="6"> <u> Visit Arco </u></font></a></b>

**Results in:**

**Visit Arco**

### 1.3.15 List

#### 1.3.15.1 Description

Field where the end user can select one (list) or more (multi select list) values.  
The value list is created together with the property.

#### 1.3.15.2 Configuration

The screenshot shows the configuration of a 'List' type field. Key settings include:

- ID:** 115279
- Name:** poolList
- Belongs to:** Pool
- Index:** Searchable (Normal selected)
- Type:** List
- Default value:** Value1
- Options:**
  - Visible in Read-Only/Archive (unchecked)
  - Printable (checked)
  - Checkboxes (checked)
  - Multi select (checked)
  - Refresh on change (unchecked)
- List:** Contains items Value1, Value2, Value3.

#### 1.3.15.2.1 Property parameters

Field name	Information
<b>Default value</b>	<i>Value that is shown by default in the field in the Doma web interface. You can select the value using the dropdown</i>
<b>Radio buttons</b>	<i>Remark: If this option is combined with multi select, Radio buttons will change into Checkboxes.</i>
<b>Checkboxes</b>	<input checked="" type="checkbox"/> <i>The list items are presented as individual items with a radio button before them. If checked, the number of items per row needs to be entered</i> <input type="checkbox"/> <i>The list items are presented in a dropdown list.</i>
<b>Multi select</b>	<input checked="" type="checkbox"/> <i>The end user can select more than one item out of the list.</i> <input type="checkbox"/> <i>Only one item of the list can be selected by the end user.</i>
<b>Refresh on change</b>	<input checked="" type="checkbox"/> <i>The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.</i> <input type="checkbox"/> <i>The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.</i>
<b>List</b>	<i>Enter here the items that must be available in the list. To add an item: position the cursor in the field list, and then enter a value. Press the [Enter] key. Then enter a new value.</i>

The list will be sorted when clicking on the Sort Button.

### 1.3.15.3 Output in the web interface

**Definition:**

Default value	Value1
<hr/>	
Options	
<input type="checkbox"/> Visible in Read-Only/Archive	
<input checked="" type="checkbox"/> Printable	
<input checked="" type="checkbox"/> Checkboxes	Number of items per row Default (2)
<input checked="" type="checkbox"/> Multi select	
<input type="checkbox"/> Refresh on change	
<hr/>	
List	
List	Value1 Value2 Value3

**Results in:**

poolList	<input checked="" type="checkbox"/> Value1	<input type="checkbox"/> Value2
	<input type="checkbox"/> Value3	

### 1.3.16 LookUp

#### 1.3.16.1 Description

Field that allows you to get data from a database table either in the internal DocRoom database, either in an external database using an ODBC connection...

#### 1.3.16.2 Configuration

The screenshot shows the Arco configuration interface for a 'LookUp' property. The left sidebar includes 'Property', 'Translation', 'Categories', 'Screens', 'Notes', and 'Audit' tabs. The main panel has sections for 'ID' (115281), 'Name' (poolLookup), 'Virtual' (unchecked), 'Belongs to' (Pool), 'Index' (Searchable: None), 'Type' (Lookup), 'Default value' (empty), 'Search' (Contains), 'Parts to hide' (None), 'Options' (Visible in Read-Only/Archive, Printable checked, Radio buttons, Multi select, Advanced, Refresh on change unchecked), and 'Lookup' (Connection string: ., Query: Select user\_login from rtusers, Test button).

##### 1.3.16.2.1 Property parameters

Field name	Information
<b>Default value</b>	Value by default, must exist in the values returned by the lookup. Can be selected using the drop down box, after entering the lookup definition
<b>Search</b>	Contains: the system will show the values that contain the text entered in the search box or list box Starts With: the system will show only the values that start with the text entered in the search box or list box
<b>Parts to hide</b>	<p><b>Remark:</b> These settings apply when rendering the property in <b>writable mode</b></p> <p><input checked="" type="checkbox"/> (Select all): all options below are checked</p> <p><input checked="" type="checkbox"/> AdvancedSearchBox: the property is rendered with a  button and a pop-up window to make a selection (only in combination with multi select option)</p> <p><input type="checkbox"/> AdvancedSearchBox: no popup window available</p> <p><input checked="" type="checkbox"/> SelectedBox: the selected values of the property are rendered in a table</p> <p><input type="checkbox"/> SelectedBox: no table is shown for the selected values</p> <p><input checked="" type="checkbox"/> DeleteIcon: an  icon is added to be able to delete entries in the</p>

<p><i>table with selections, applicable if <input checked="" type="checkbox"/> SelectedBox is checked</i></p> <p><input type="checkbox"/> <i>DeleteIcon: no  is rendered. Deletion is not possible from the selected values.</i></p> <p><i>If no option is checked, 'None' is displayed in DomaAdmin</i></p>	
<b>Display Style</b>	<p><b>Remark:</b> only available for Advanced lookup (see below)</p> <p><b>Remark:</b> These settings apply when rendering the property in <b>writable mode</b></p> <p><i>Inline: the property is rendered as a dropdown list</i></p> <p><i>Popup: the property is rendered as a pop-up screen with a  button</i></p> <p><i>Both: Inline and Popup are active</i></p>
<b>Radio Buttons</b>	<p><b>Remark:</b> If this option is combined with multi select, Radio buttons will change into Checkboxes.</p> <p><input checked="" type="checkbox"/> <i>The list items are presented as individual items with a radio button before them. If checked, the number of items per row needs to be entered</i></p> <p><input type="checkbox"/> <i>The list items are presented in a dropdown list.</i></p>
<b>Multi select</b>	<p><input checked="" type="checkbox"/> <i>The end user can select more than one item out of the list.</i></p> <p><input type="checkbox"/> <i>Only one item of the list can be selected by the end user.</i></p>
<b>Advanced</b>	<p><i>The advanced lookup is a special version of the standard lookup field. It allows users to select an item out of a larger list with more information than in a dropdown field.</i></p> <p><input checked="" type="checkbox"/> <i>If selected, the tab <b>Lookup</b> will appear as an extra tab in the lookup configuration screen. It will appear as a second configuration tab, between the tabs Property and Configuration. See below for more information about this tab</i></p> <p><input type="checkbox"/> <i>If not selected, the standard lookup field is active. Only one table column will be presented.</i></p>
<b>Refresh on change</b>	<p><input checked="" type="checkbox"/> <i>The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.</i></p> <p><input type="checkbox"/> <i>The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.</i></p>
<b>Connection string</b>	<p>Enter here the connection string to the database.</p> <p><i>If the table is internal to the DocRoom database, use a . (dot).</i></p> <p><i>For tables in an external database, define a System ODBC source to this database on the DocRoom server, and enter the DSN in this field:</i></p> <p><b>DSN=DSN Name</b> (mandatory); <b>UID=user name</b> (optional);  <b>PWD=password</b> (optional); <b>DB=dbname</b> (optional).  <i>Replace the words in bold by the real values.</i></p> <p><i>Example: DSN=Arcofolder;UID=ARCO;PWD=ARCO</i>  <i>Example: DSN=sql2012; Trusted_Connection=yes;</i>  <i>database=Adventureworks2012</i></p> <p><i>Click on the button Test to test the connection.</i></p>
<b>Query</b>	Enter the following query statement: Select X from Y (X: return single columns) Replace X and Y by existing values.

### 1.3.16.2.2 Tab Lookup (Advanced lookup)

Connection string

Table(s) RTUSERS

Where

Order by USER\_LOGIN

Records per page 25

Auto load

Open maximized

Fields

Drag a column header here to group by that column					
	FIELD	HEADING	SELECTION	SEARCHABLE	DISPLAY
>	USER_LOGIN	Login	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow
	User_Desc	Naam	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, TooltipWindow

#### 1.3.16.2.2.1 Fields en options

Field name	Information
Connection string	<p>Enter here the connection string to the database.</p> <p>If the table is internal to the DocRoom database, use a . (dot).</p> <p>For tables in an external database, define a System ODBC source to this database on the DocRoom server, and enter the DSN in this field:</p> <p><b>DSN=DSN Name</b> (mandatory); <b>UID=user name</b> (optional);  <b>PWD=password</b> (optional); <b>DB=dbname</b> (optional).</p> <p>Replace the words in bold by the real values.</p> <p>Example: DSN=Arcofolder;UID=ARCO;PWD=ARCO  Example: DSN=sql2012; Trusted_Connection=yes;  database=Adventureworks2012</p>
Table(s)	Enter the tables or view names to be used in the lookup. More table names are possible when using joins between SQL tables
Where	Enter a where clause to filter in the select
Order by	Enter the order by clause when ordering is needed
Records per page	The number of records shown per page in the lookup screen in the web interface
Auto load	<input checked="" type="checkbox"/> The popup screen opens and loads already the list of values <input type="checkbox"/> The popup screen opens but shows only the search fields. It does not load the list of values.
Open maximized	<input checked="" type="checkbox"/> the lookup screen opens in 'maximized' mode in the web interface <input type="checkbox"/> the lookup screen opens in 'normal' mode in the web interface

#### 1.3.16.2.3 Fields mapping

The Fields section defines the fields to be selected by the SQL Query.

Click on 'New field' in order to add a new field

Field name	Information
<b>FIELD</b>	<i>The name of the field in the SQL table. Make sure that this name matches exactly to the name of the field as defined in the SQL table or view.</i>
<b>HEADING</b>	<i>The name for the field rendered in the web interface</i>
<b>SELECTION</b>	<b>Remark:</b> Only one field can be checked as 'selected' <input checked="" type="checkbox"/> this field is the key field of the list <input type="checkbox"/> no key field
<b>SEARCHABLE</b>	<input checked="" type="checkbox"/> This field is a search field in the lookup screen. <input type="checkbox"/> This field is no search field. It will be shown, but cannot be searched.
<b>DISPLAY</b>	<i>PopupWindow: the field is shown in the popup window (if applicable)  DetailWindow: the field is shown in the detail table with the selected values(if applicable)  TooltipWindow: the field is shown in the tooltip window of the table with selected values (if applicable)  (Select All): all of the above apply</i>

### 1.3.16.3 Output in the web interface

#### Definition: single select lookup

ID	115281
Name	poolLookup
<input type="checkbox"/> Virtual	
<u>Belongs to</u>	
Pool	
<u>Index</u>	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Lookup
Default value	
Search	Contains
Parts to hide	None
<u>Options</u>	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input type="checkbox"/> Printable <input type="checkbox"/> Radio buttons <input type="checkbox"/> Multi select <input type="checkbox"/> Advanced <input checked="" type="checkbox"/> Refresh on change	
<u>Lookup</u>	
Connection string	DSN=sq 2012;Trusted_Connection=yes;database=Adventureworks2012
Query	Select Firstname + '' + Lastname from person.person

**Results in edit mode in:**

poolLookup

poolLookup

poolList

A. Leonetti  
A. Wright  
A. Scott Wright  
Aaron Wright  
Aaron Yang  
Aaron Young  
Aaron Zhang  
Aaron Wang  
**Aaron Washington**  
Aaron Nicholls  
Aaron Patterson  
Aaron Perez  
Aaron Perry  
Aaron Phillips  
Aaron Powell  
Aaron Roberts  
Aaron Ross  
Aaron Russell  
Aaron Scott  
Aaron Shan

**After selection:**

poolLookup

Aaron Patterson

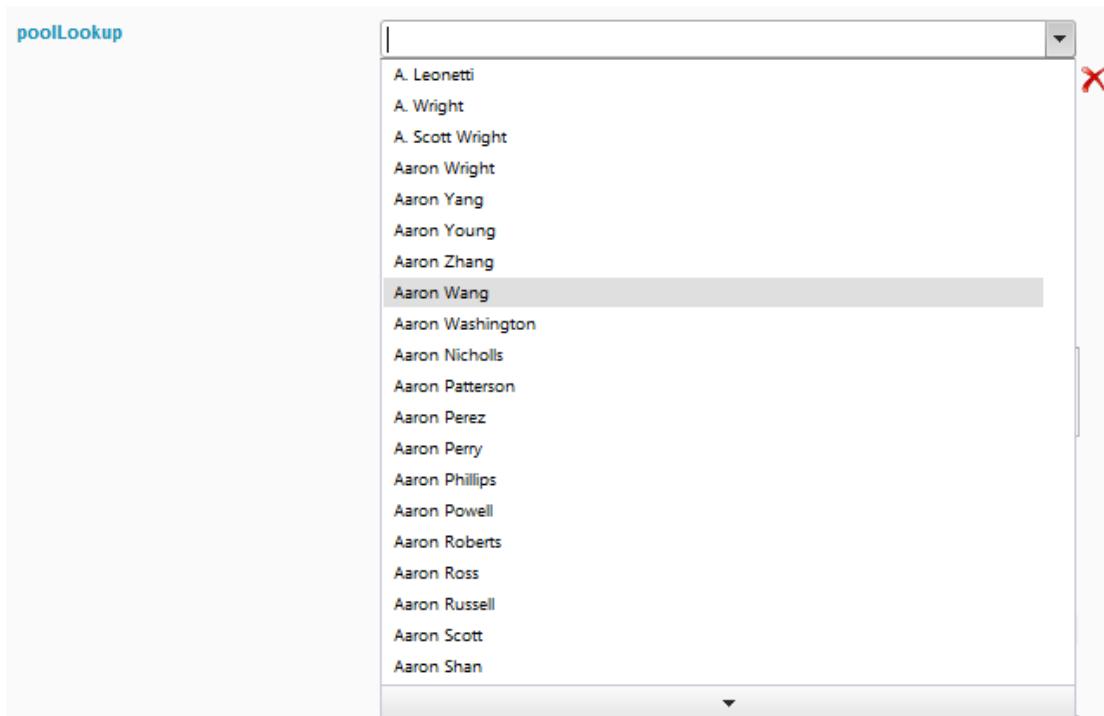
### Definition: multi select lookup

ID	115281
Name	poolLookup
<input type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Lookup
Default value	
Search	Contains
Parts to hide	None
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input type="checkbox"/> Printable <input type="checkbox"/> Checkboxes <input checked="" type="checkbox"/> Multi select <input type="checkbox"/> Advanced <input checked="" type="checkbox"/> Refresh on change	
Lookup	
Connection string	DSN=sql2012;Trusted_Connection=yes;database=Adventureworks2012
Query	Select Firstname + '' + Lastname from person.person order by Firstname

### Results in edit mode in:

poolLookup

X



After selection of more values:



## Definition: multi select advanced lookup

### Property Definition

ID	115283
Name	poolLookupAdvanced
<input type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Lookup
Max. length	2000
Default value	
Search	Contains
Parts to hide	None
Display style	Both
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Checkboxes <input checked="" type="checkbox"/> Multi select <input checked="" type="checkbox"/> Advanced <input type="checkbox"/> Refresh on change	

### Lookup definition

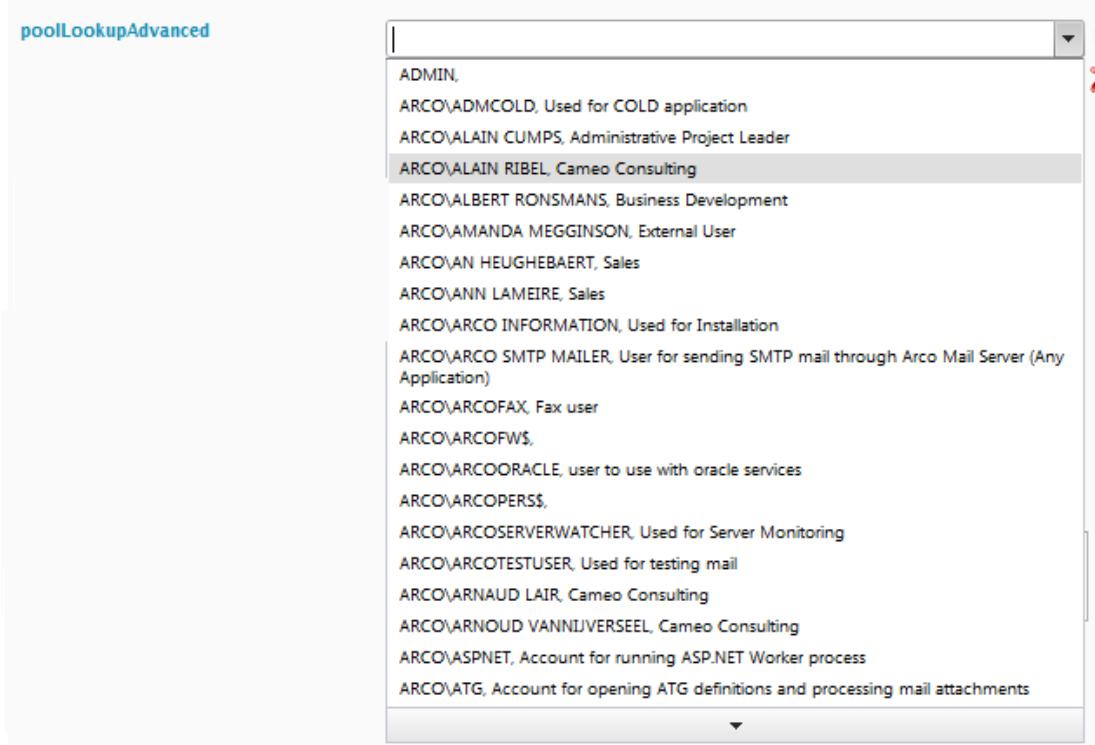
	Connection string .															
	Table(s) RTUSERS															
	Where															
	Order by USER_LOGIN															
	Records per page 25															
	<input type="checkbox"/> Auto load <input type="checkbox"/> Open maximized															
	Fields															
Drag a column header here to group by that column																
	<table border="1"> <thead> <tr> <th>FIELD</th> <th>HEADING</th> <th>SELECTION</th> <th>SEARCHABLE</th> <th>DISPLAY</th> </tr> </thead> <tbody> <tr> <td>USER_LOGIN</td> <td>Login</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>PopupWindow, DetailWindow, TooltipWindow</td> </tr> <tr> <td>User_Desc</td> <td>Naam</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>PopupWindow, DetailWindow, TooltipWindow</td> </tr> </tbody> </table>	FIELD	HEADING	SELECTION	SEARCHABLE	DISPLAY	USER_LOGIN	Login	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow	User_Desc	Naam	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
FIELD	HEADING	SELECTION	SEARCHABLE	DISPLAY												
USER_LOGIN	Login	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow												
User_Desc	Naam	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow												

### Result in edit mode:

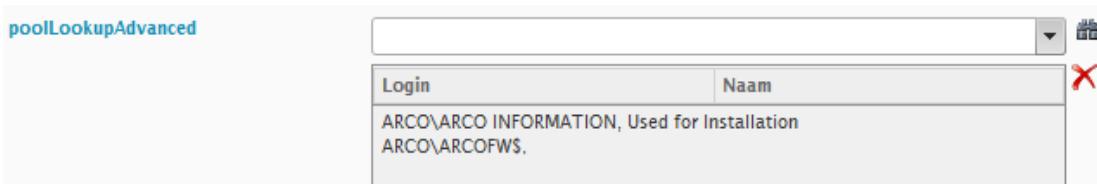
poolLookupAdvanced

<input type="text"/>		
Login	Naam	

### Clicking the drop down arrow:



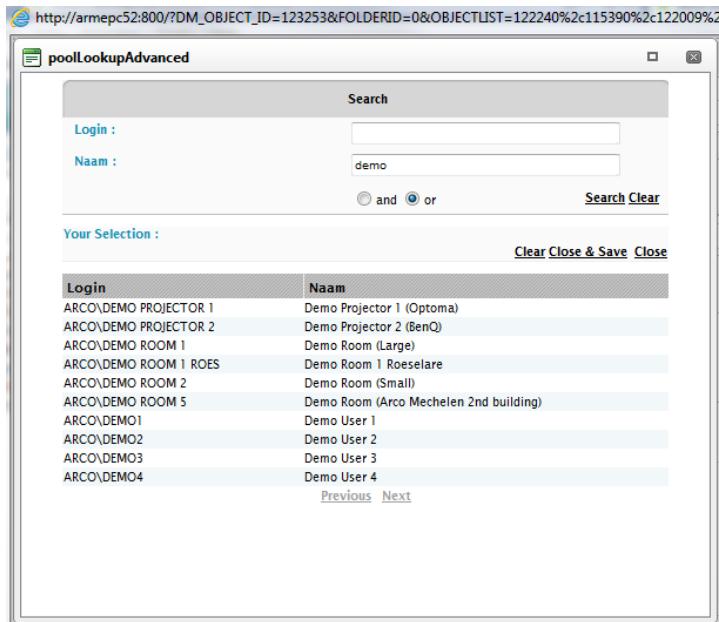
### After selection



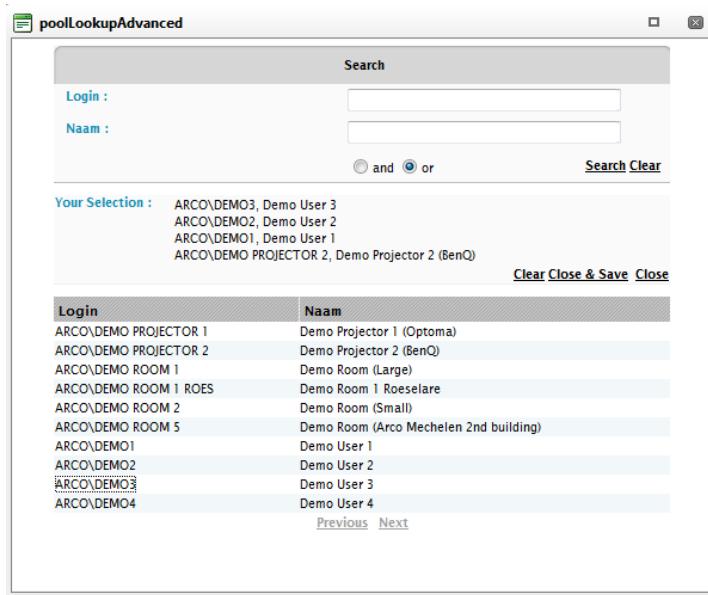
### In read only mode:

poolLookupAdvanced	Login	Naam
?	ARCO\ARCOFW\$	
?	ARCO\ARCO INFORMATION	Used for Installation

Clicking the search button :



And selecting:



**Results in:**

poolLookupAdvanced

Login	Naam	X
ARCO\DEMO3, Demo User 3		
ARCO\DEMO2, Demo User 2		
ARCO\DEMO1, Demo User 1		

**Clicking the X button after selecting an item will delete this item:**

poolLookupAdvanced

Login	Naam	X
ARCO\DEMO3, Demo User 3		
ARCO\DEMO2, Demo User 2		
ARCO\DEMO1, Demo User 1		

**Results in:**

poolLookupAdvanced

Login	Naam	X
ARCO\DEMO3, Demo User 3		
ARCO\DEMO1, Demo User 1		
ARCO\DEMO PROJECTOR 2, Demo Projector 2 (BenQ)		

**In Readonly mode:**

poolLookupAdvanced

	Login	Naam
?	ARCO\DEMO3	Demo User 3
?	ARCO\DEMO1	Demo User 1
?	ARCO\DEMO PROJECTOR 2	Demo Projector 2 (BenQ)

## Definition: multi select advanced lookup with joined tables

### Property Definition

ID	124388
Name	poolLookupAdvancedWithJoin
<input type="checkbox"/> Virtual	
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Lookup
Max. length	2000
Default value	
Search	Contains
Parts to hide	None
Display style	Both
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Checkboxes <input checked="" type="checkbox"/> Multi select <input checked="" type="checkbox"/> Advanced <input type="checkbox"/> Refresh on change	

### Lookup definition

	Property	Connection string	.		
	Translation	Table(s)	rtusers, rtuser_setting		
	Lookup	Where	rtusers.user_login = rtuser_setting.user_id		
	Categories	Order by	user_display_name		
	Screens	Records per page	25		
	Notes	<input type="checkbox"/> Auto load			
	Audit	<input type="checkbox"/> Open maximized			
Fields					
Drag a column header here to group by that column					
	FIELD	HEADING	SELECTION	SEARCHABLE	DISPLAY
	USER_LOGIN	Account	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow
	USER_DISPLAY_NAME	Name	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
	PARMNAME	Parameter	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow
	PARMVALUE	Value	<input type="checkbox"/>	<input type="checkbox"/>	PopupWindow, DetailWindow, TooltipWindow

### Result in edit mode:

poolLookupAdvancedWithJoin

<table border="1"> <thead> <tr> <th>Name</th> <th>Parameter</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>X</td> </tr> </tbody> </table>			Name	Parameter	Value			X
Name	Parameter	Value						
		X						

### Clicking the search button:

poolLookupAdvancedWithJoin

**Search**

Account :

Name :

Parameter :

and  or  and  or

**Your Selection :** [Clear](#) [Close & Save](#) [Close](#)

poolLookupAdvancedWithJoin

**Search**

Account :

Name :

Parameter :

and  or  and  or

**Your Selection :** [Clear](#) [Close & Save](#) [Close](#)

Account	Name	Parameter	Value
ARCO\DEMO1	Demol	ALWAYSSHOWATTACHMENTS	Y

[Previous](#) [Next](#)

### Results in:

poolLookupAdvancedWithJoin

	Name	Parameter	Value
	Demol	ALWAYSSHOWATTACHMENTS	Y

### In Readonly mode:

pool.lookupAdvancedWithJoin

	Name	Parameter	Value
?	Demol	ALWAYSSHOWATTACHMENTS	Y

### 1.3.17 Managed List

#### 1.3.17.1 Description

Field where the end user can select one (list) or more (multi select list) values from a managed list defined in the DocRoom Web Interface.

The values of the managed list are defined in the DocRoom web interface, allowing pre-defined users to manage the content of the list directly from the web interface without the need to have high access rights or access to the Doma admin tool.

#### 1.3.17.2 Configuration

The screenshot shows the 'Property' configuration screen for a 'ManagedList' type property. The left sidebar lists other property types: Translation, Categories, Screens, Notes, and Audit. The main configuration area is divided into several sections:

- Property**: ID: 115311, Name: PoolManagedList, Virtual: checked.
- Belongs to**: Pool.
- Index**: Searchable: None (radio button selected).
- Type**: ManagedList.
- Default value**: (empty).
- Auto complete**: Contains.
- Parts to hide**: None.
- Display style**: Inline.
- Options**: Visible in Read-Only/Archive (checked), Printable (checked), Radio buttons (unchecked), Multi select (unchecked), Refresh on change (unchecked).
- Managed list**: Managed list: ExampleListForProperty.

##### 1.3.17.2.1 Property parameters

Field name	Information
Default value	Value that is shown by default in the field in the Doma web interface.
Auto Complete	Contains: the system will automatically select the unique value that contains the text entered in the search box or list box Starts With: the system will automatically select the unique value that starts with the text entered in the search box or list box
Parts to hide	<b>Remark:</b> These settings apply when rendering the property in <b>writable</b>

	<p><i>mode</i></p> <p><input checked="" type="checkbox"/> <i>(Select all): all options below are checked</i></p> <p><input checked="" type="checkbox"/> <i>AdvancedSearchBox: the property is rendered with a  button and a pop-up window to make a selection (only in combination with multi select option)</i></p> <p><input type="checkbox"/> <i>AdvancedSearchBox: no popup window available</i></p> <p><input checked="" type="checkbox"/> <i>SelectedBox: the selected values of the property are rendered in a table</i></p> <p><input type="checkbox"/> <i>SelectedBox: no table is shown for the selected values</i></p> <p><input checked="" type="checkbox"/> <i>DeleteIcon: an  icon is added to be able to delete entries in the table with selections, applicable if <input checked="" type="checkbox"/> SelectedBox is checked</i></p> <p><input type="checkbox"/> <i>DeleteIcon: no  is rendered. Deletion is not possible from the selected values.</i></p> <p>If no option is checked, 'None' is displayed in DomaAdmin</p>
<b>Display Style</b>	<p><b>Remark:</b> These settings apply when rendering the property in <b>writable</b> mode</p> <p><i>Inline: the property is rendered as a dropdown list</i></p> <p><i>Popup: the property is rendered as a pop-up screen with a  button</i></p> <p><i>Both: Inline and Popup are active</i></p>
<b>Radio buttons</b>	<p><b>Remark:</b> Only available when Display Style = <i>Inline</i>.</p>
<b>Checkboxes</b>	<p><b>Remark:</b> If this option is combined with multi select, Radio buttons will change into Checkboxes.</p> <p><input checked="" type="checkbox"/> <i>The list items are presented as individual items with a radio button before them. If checked, the number of items per row needs to be entered</i></p> <p><input type="checkbox"/> <i>The list items are presented in a dropdown list.</i></p>
<b>Multi select</b>	<p><input checked="" type="checkbox"/> <i>The end user can select more than one item out of the list.</i></p> <p><input type="checkbox"/> <i>Only one item of the list can be selected by the end user.</i></p>
<b>Refresh on change</b>	<p><input checked="" type="checkbox"/> <i>The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.</i></p> <p><input type="checkbox"/> <i>The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.</i></p>
<b>Managed List</b>	<p>Select the managed list (must be defined first in the DocRoom Web Interface)</p>

### 1.3.17.3 Output in the web interface

#### Definition of the Managed list (DocRoom Web Interface):

Managed Lists																		
Name : ExampleListForProperty	Status : Enabled	Lock :																
Create new list																		
<div style="border: 1px solid #ccc; padding: 10px;"> <p><b>Update list</b></p> <table border="0"> <tr> <td>Name :</td> <td><input type="text" value="ExampleListForProperty"/></td> </tr> <tr> <td>Type :</td> <td><input type="text" value="LIST"/></td> </tr> <tr> <td>Multi-lingual :</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Use synonyms :</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Allow new :</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Category dependant :</td> <td><input type="checkbox"/></td> </tr> <tr> <td colspan="2"><a href="#">Edit list items</a></td> </tr> <tr> <td colspan="2" style="text-align: right;"><a href="#">Unlock</a> <a href="#">Save</a></td> </tr> </table> </div>			Name :	<input type="text" value="ExampleListForProperty"/>	Type :	<input type="text" value="LIST"/>	Multi-lingual :	<input type="checkbox"/>	Use synonyms :	<input type="checkbox"/>	Allow new :	<input type="checkbox"/>	Category dependant :	<input type="checkbox"/>	<a href="#">Edit list items</a>		<a href="#">Unlock</a> <a href="#">Save</a>	
Name :	<input type="text" value="ExampleListForProperty"/>																	
Type :	<input type="text" value="LIST"/>																	
Multi-lingual :	<input type="checkbox"/>																	
Use synonyms :	<input type="checkbox"/>																	
Allow new :	<input type="checkbox"/>																	
Category dependant :	<input type="checkbox"/>																	
<a href="#">Edit list items</a>																		
<a href="#">Unlock</a> <a href="#">Save</a>																		

**With list values:**

### LIST - ExampleListForProperty

Name	Active
ManagedListValue1	<input checked="" type="checkbox"/>
ManagedListValue2	<input checked="" type="checkbox"/>
ManagedListValue3	<input checked="" type="checkbox"/>
ManagedListValue4	<input checked="" type="checkbox"/>
ManagedListValue5	<input checked="" type="checkbox"/>

▶ [ ] ✓ [ ] You are viewing page 1 of 1

### Definition of the property:

Property Translation Categories Screens Notes Audit	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="padding: 5px;"><b>Property</b></td> </tr> <tr> <td>ID</td> <td>115311</td> </tr> <tr> <td>Name</td> <td>PoolManagedList</td> </tr> <tr> <td><input type="checkbox"/> Virtual</td> <td></td> </tr> <tr> <td colspan="2" style="padding: 5px;"><b>Belongs to</b></td> </tr> <tr> <td colspan="2" style="padding: 5px;">Pool</td> </tr> <tr> <td colspan="2" style="padding: 5px;"><b>Index</b></td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <input type="checkbox"/> Searchable           <input checked="" type="radio"/> Normal           <input type="radio"/> Fulltext           <input checked="" type="radio"/> None         </td> </tr> <tr> <td>Type</td> <td>ManagedList</td> </tr> <tr> <td>Default value</td> <td></td> </tr> <tr> <td>Auto complete</td> <td>Contains</td> </tr> <tr> <td>Parts to hide</td> <td>None</td> </tr> <tr> <td>Display style</td> <td>Inline</td> </tr> <tr> <td colspan="2" style="padding: 5px;"><b>Options</b></td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <input checked="" type="checkbox"/> Visible in Read-Only/Archive  <input checked="" type="checkbox"/> Printable  <input checked="" type="checkbox"/> Checkboxes      Number of items per row Default (2)  <input checked="" type="checkbox"/> Multi select  <input type="checkbox"/> Refresh on change         </td> </tr> <tr> <td colspan="2" style="padding: 5px;"><b>Managed list</b></td> </tr> <tr> <td>Managed list</td> <td>ExampleListForProperty</td> </tr> </table>	<b>Property</b>		ID	115311	Name	PoolManagedList	<input type="checkbox"/> Virtual		<b>Belongs to</b>		Pool		<b>Index</b>		<input type="checkbox"/> Searchable <input checked="" type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None		Type	ManagedList	Default value		Auto complete	Contains	Parts to hide	None	Display style	Inline	<b>Options</b>		<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input checked="" type="checkbox"/> Checkboxes      Number of items per row Default (2) <input checked="" type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change		<b>Managed list</b>		Managed list	ExampleListForProperty
<b>Property</b>																																			
ID	115311																																		
Name	PoolManagedList																																		
<input type="checkbox"/> Virtual																																			
<b>Belongs to</b>																																			
Pool																																			
<b>Index</b>																																			
<input type="checkbox"/> Searchable <input checked="" type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None																																			
Type	ManagedList																																		
Default value																																			
Auto complete	Contains																																		
Parts to hide	None																																		
Display style	Inline																																		
<b>Options</b>																																			
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input checked="" type="checkbox"/> Checkboxes      Number of items per row Default (2) <input checked="" type="checkbox"/> Multi select <input type="checkbox"/> Refresh on change																																			
<b>Managed list</b>																																			
Managed list	ExampleListForProperty																																		

### Results in:

<b>PoolManagedList</b>	<input type="checkbox"/> ManagedListValue1 <input type="checkbox"/> ManagedListValue2 <input type="checkbox"/> ManagedListValue3 <input type="checkbox"/> ManagedListValue4 <input type="checkbox"/> ManagedListValue5
------------------------	--

### 1.3.18 Number

#### 1.3.18.1 Description

Field in which the user can only insert integer values {..., -3, -2, -1, 0, 1, 2, 3, ... }. It is not possible to add decimal values in this field.

When entering a non-integer value, the value will be rounded to an integer value.

#### 1.3.18.2 Configuration

##### 1.3.18.2.1 Property parameters

Field name	Information
<b>Min. value</b>	<i>The value entered in the field cannot be lower than the number defined in this field.</i>
<b>Max. value</b>	<i>The value entered in the field cannot be higher than the number defined in this field.</i>
<b>Default value</b>	<i>Possibility to enter a default value for the field. This value will appear as a standard value when creating a new object.</i>

#### 1.3.18.3 Output in the web interface

**Definition:**

**Property**

ID	115314		
Name	poolNumber		
Virtual	<input type="checkbox"/>		
Belongs to	Pool		
Index			
Searchable	<input type="checkbox"/> Normal <input type="checkbox"/> Fulltext <input checked="" type="radio"/> None		
Type	Number		
Min. value	0	Max. value	100
Default value	50		
Options			
<input checked="" type="checkbox"/> Visible in Read-Only/Archive			
<input checked="" type="checkbox"/> Printable			

**Results in:****poolNumber**

50

**Entering a wrong value will result into an error message:****poolNumber**

-32

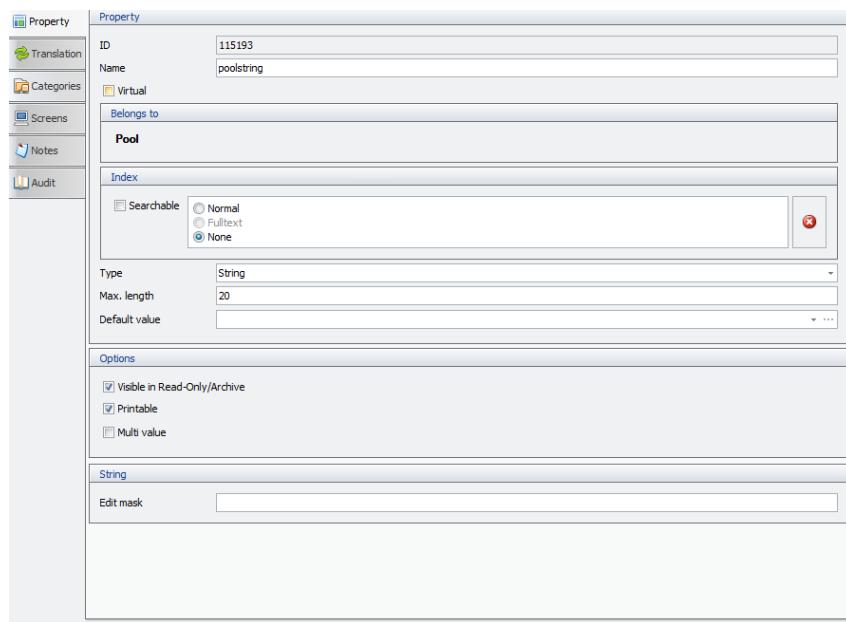
poolNumber must be between 0 and 100

### 1.3.19 String

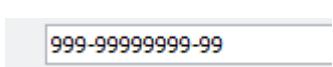
#### 1.3.19.1 Description

Field in which the user can add text.

#### 1.3.19.2 Configuration



##### 1.3.19.2.1 Property parameters

Field name	Information
<b>Max. Length</b>	A maximal number of possible characters is indicated here. Default = 2000
<b>Default value</b>	Possibility to enter a default value for the field. This value will appear as a standard value when creating a new object.
<b>Multi value</b>	<input checked="" type="checkbox"/> Allows the user to enter multiple values in this one field. All words entered on one line (delimiter = [enter]) will be considered as one value. <input type="checkbox"/> User can enter a sequence of words that will be found individually when searching upon it.
<b>Edit mask</b>	Possibility to enter a pre-defined format for this field. The end user can only enter data in this format. This way, errors during insert can be avoided. Input definition for a number = 9; definition for a letter is a. Input restricted to 2 numbers followed by 2 letters is then 99aa.  <u>An example:</u> In the example below, the end user can only add numbers; the application automatically adds the rest of the format, so the end user gets a clear visualisation of the account number:  Doma also allows the use of regular expressions in the field Edit Mask of the properties of the type Text. It will treat every edit mask that starts and ends with the character "/" as a regular expression.

**An Example:**

We want the user to input a text file. Therefore, we will run a check on the extension .txt.  
The edit mask for all items that end with .txt (like a search on \*.txt) is ".\*\.\.txt".

**1.3.19.3 Output in the web interface****Definition:**

Property	
ID	115193
Name	poolstring
<input type="checkbox"/> Virtual	
Belongs to	
Pool	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	String
Max. length	15
Default value	
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Multi value	
String	
Edit mask	999-99999999-99

**Results in:**

poolstring	_____
poolstring	001-01000101-00

### 1.3.20 Tab

#### 1.3.20.1 Description

This property is only available to ensure backward compatibility with previous versions.

Do not use it in version 6. To define tabs in new screens, please use the tab definition in the screens tab to define tabs in version 6.

Property that will create a tab in the web interface.

All properties selected after this property, will be visualized in this tab.

#### 1.3.20.2 Configuration



#### 1.3.20.2.1 Property parameters

#### 1.3.20.3 Output in the web interface



### 1.3.21 Table

#### 1.3.21.1 Description

Property that defines a table. Each row in the table is defined by a set of column properties.

Functionality is foreseen to add, modify and delete rows.

#### 1.3.21.2 Configuration

<span style="font-size: 10px;">Property</span> <span style="font-size: 10px;">Translation</span> <span style="font-size: 10px;">Table fields</span> <span style="font-size: 10px;">Categories</span> <span style="font-size: 10px;">Screens</span> <span style="font-size: 10px;">Notes</span> <span style="font-size: 10px;">Audit</span>	<b>Property</b> ID: 115318 Name: poolTable Belongs to: Pool Index: <input type="checkbox"/> Searchable <input type="radio"/> Normal <input type="radio"/> Fulltext <input type="radio"/> None <input type="button" value="X"/> Type: Table Options: <input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Full table editing
--	--

##### 1.3.21.2.1 Property parameters

Field name	Information
<b>Full table editing</b>	<input checked="" type="checkbox"/> Editing the table will be rendered as one popup screen for each row being added, edited. This popup screen contains a toolbar with navigation buttons. <input type="checkbox"/> Editing the table will be rendered as one popup screen with all table rows.

Once you have configured the general parameters of the property, you can define the different columns of the table in the tab **Table Fields**.

##### 1.3.21.2.2 Property parameters – tab Table Fields

Here you can define, edit and delete the table columns.

On top of the tab, you see a number of checkboxes:

Field name	Information
<b>Allow new</b>	<input checked="" type="checkbox"/> rows can be added in the web Interface <input type="checkbox"/> rows cannot be added in the web Interface
<b>Allow update</b>	<input checked="" type="checkbox"/> rows can be updated in the web Interface <input type="checkbox"/> rows cannot be updated in the web Interface
<b>Allow delete</b>	<input checked="" type="checkbox"/> rows can be deleted in the web Interface <input type="checkbox"/> rows cannot be deleted in the web Interface



#### 1.3.21.2.2.1 Create a new table field (= table column)

In order to configure a new column field for the table, click on the button in the DomaAdmin toolbar.

DomaAdmin will open a new screen to configure the table field's property. This screen is similar to the screens defining a non-table field property.

All standard property types can be used for a table field, also a table property. This will result in nested tables.

#### 1.3.21.2.2.2 Edit a table field (= table column)

In order to configure an existing column field for the table, select a table field in the table



definition and click on the button in the DomaAdmin toolbar

#### 1.3.21.2.2.3 Delete a table field (=table column)

In order to delete an existing column field for the table, select a table field in the table



definition and click on the button in the DomaAdmin toolbar

#### 1.3.21.2.2.4 Sum calculations for Field types Number, Decimal, Currency

An extra option is added in the table field definition:

Options	
<input checked="" type="checkbox"/>	Visible in Read-Only/Archive
<input checked="" type="checkbox"/>	Printable
<input checked="" type="checkbox"/>	Visible
<input type="checkbox"/>	Sum

Field name	Information
Sum	<input checked="" type="checkbox"/> Total will be calculated for this column field <input type="checkbox"/> Total will not be calculated for this column field <b>Remark:</b> only applicable for table fields of Number, Decimal, and Currency. For all other types, this option is disabled.

### 1.3.21.3 Output in the web interface

**Definition: table with 'Full table editing'**

The screenshot shows the 'Property' screen for a table named 'poolTableExample'. The table is associated with a 'Pool'. The index type is set to 'Table'. In the 'Options' section, the 'Full table editing' checkbox is selected.

**Table Fields definition:**

### Results in edit mode

Click on to edit the table data:

In 'Full Table Editing', a toolbar is available:

The user can add/delete/edit rows in the same screen.

Add a new row, Save, Save and close, Close

Adding a new row:

The user can edit the data. The fields behave like standard field properties:

poolTableExample

poolTableExampleColDecimal	poolTableExampleColDate	poolTableExampleColList	poolTableExampleColLookup	poolTableExampleColString
100,00	22-06-2012	<input type="checkbox"/> Value1 <input type="checkbox"/> Value2 <input type="checkbox"/> Value3 <input type="checkbox"/> Value4 <input type="checkbox"/> Value5	Arco Information Arco Test User	teststring
200,00	11-06-2012	<input type="checkbox"/> Value1 <input checked="" type="checkbox"/> Value2 <input type="checkbox"/> Value3 <input type="checkbox"/> Value4 <input type="checkbox"/> Value5	Arco Oracle	teststring 2

Using , rows can be copied:

poolTableExample

poolTableExampleColDate	poolTableExampleColList	poolTableExampleColLookup	poolTableExampleColString	poolTableExampleColDecimal
22-06-2012	<input type="checkbox"/> Value1 <input type="checkbox"/> Value2 <input type="checkbox"/> Value3 <input type="checkbox"/> Value4 <input type="checkbox"/> Value5	Arco Oracle	test	100,00
22-06-2012	<input type="checkbox"/> Value1 <input type="checkbox"/> Value2 <input type="checkbox"/> Value3 <input type="checkbox"/> Value4 <input type="checkbox"/> Value5	Arco Oracle	test	100,00

Use the button to delete a row.

After closing the table screen:

poolTableExampleColDate	poolTableExampleColList	poolTableExampleColLookup	poolTableExampleColString	poolTableExampleColDecimal
22-06-2012	Value3	Arco Information, Arco Test User	teststring	100,00
11-06-2012	Value2	Arco Oracle	teststring 2	200,00
Totals:				
				300,00

### Definition: table without 'Full table editing'

Property

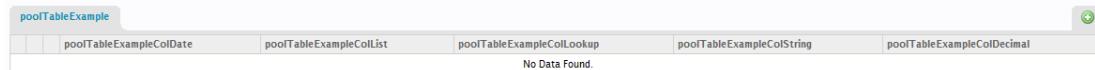
ID	124568
Name	poolTableExample
Belongs to	Pool
Index	<input type="checkbox"/> Searchable <input type="radio"/> Normal <input type="radio"/> Fulltext <input type="radio"/> None
Type	Table
Options	<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Full table editing

### Table Fields definition (same as example above)

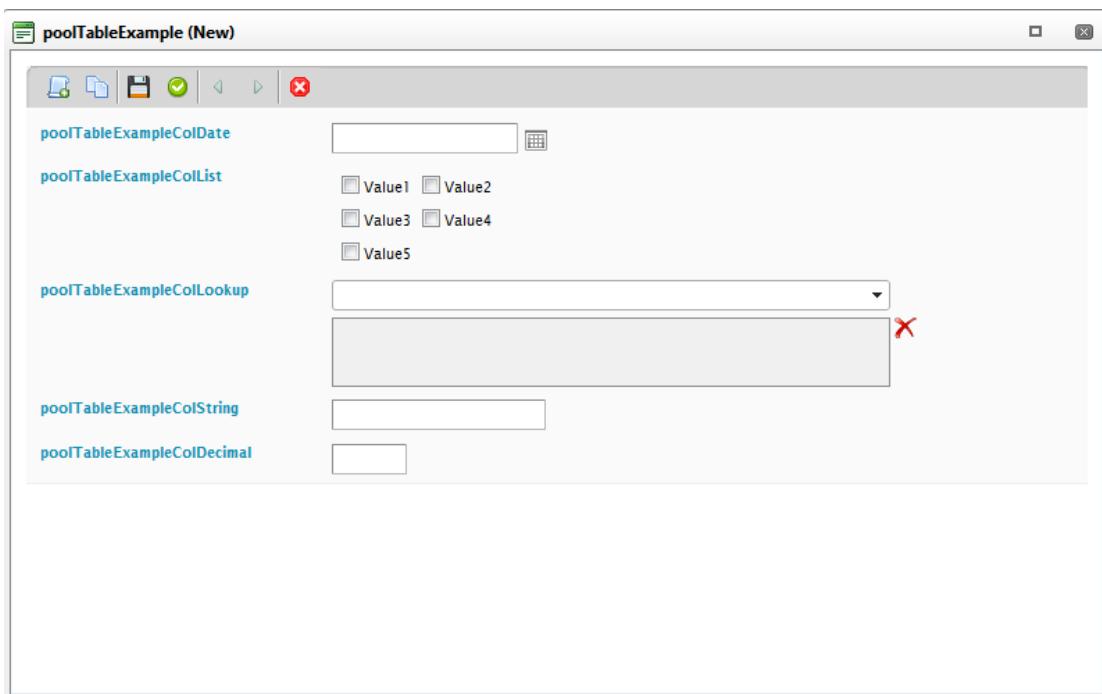
Property

NAME	TYPE	LENGTH
poolTableExampleColDate	DATE	20
poolTableExampleColList	LIST	2000
poolTableExampleColLookup	LOOKUP	2000
poolTableExampleColString	STRING	20
poolTableExampleColDecimal	DECIMAL	10

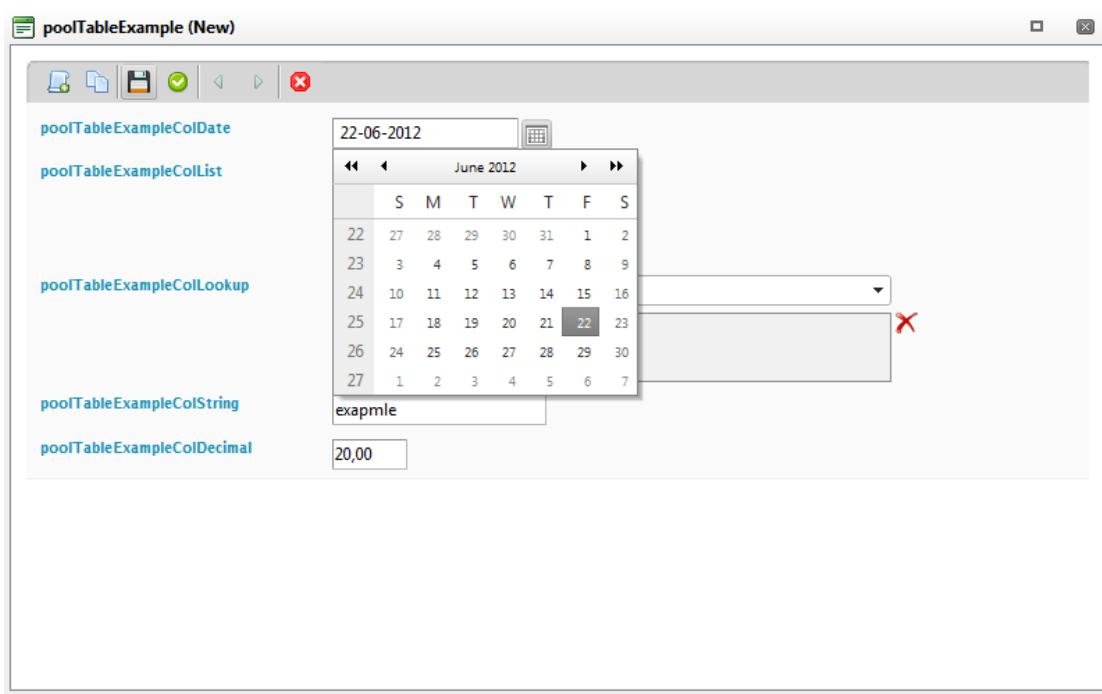
## Results in edit mode



Click on to add a row to the table. A new pop-up screen appears for editing the row:



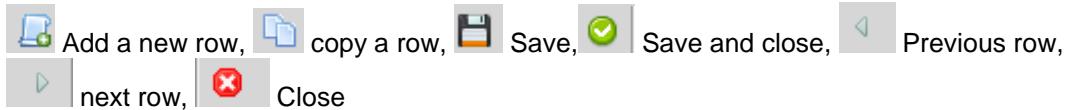
The user can edit the data. The fields behave like standard field properties:



In the pop-up screen, a toolbar is available:



The user can add/delete/edit and scroll between the rows, one row at a time:



After closing the table screen:

	poolTableExample	poolTableExampleColDate	poolTableExampleColList	poolTableExampleColLookup	poolTableExampleColString	poolTableExampleColDecimal
		22-06-2012	Value4	ATG	example	20,00
		20-06-2012	Value3	Arco Oracle		
		28-06-2012	Value3	Arco Test User		

On each table row, buttons are available for modifying a row:



- Open the row for editing:

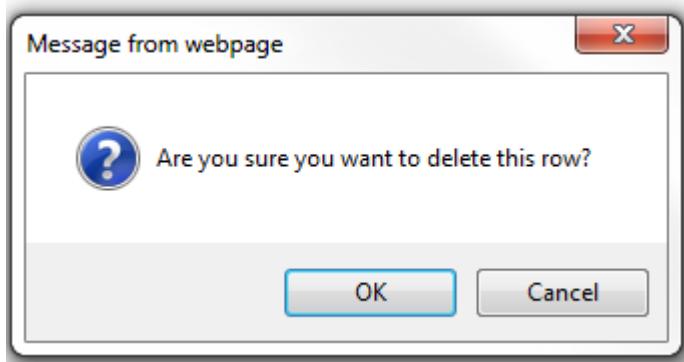
poolTableExample (2/3)

	poolTableExampleColDate	poolTableExampleColList	poolTableExampleColLookup	poolTableExampleColString	poolTableExampleColDecimal
	20-06-2012	<input type="checkbox"/> Value1 <input type="checkbox"/> Value2 <input checked="" type="checkbox"/> Value3 <input type="checkbox"/> Value4 <input type="checkbox"/> Value5	Arco Oracle		

- Copies the row and adds it to the table:

	poolTableExample	poolTableExampleColDate	poolTableExampleColList	poolTableExampleColLookup	poolTableExampleColString	poolTableExampleColDecimal
		22-06-2012	Value4	ATG	example	20,00
		20-06-2012	Value3	Arco Oracle		
		28-06-2012	Value3	Arco Test User		
		20-06-2012	Value3	Arco Oracle		

- Delete the row after confirmation:



## Nested tables

### Master table definition:

ID	124600
Name	poolNestedTablesExample
Belongs to	
<b>Pool</b>	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Table
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Full table editing	

### Master table fields

	<input checked="" type="checkbox"/> Allow new	<input checked="" type="checkbox"/> Allow update	<input type="checkbox"/> Allow delete			
Property						
Translation						
Table fields						
Categories						
Screens						
Notes						
Audit						
NAME				TYPE		LENGTH
poolTableExampleColDate				DATE		2
poolTableExampleColDecimal				DECIMAL		1
poolTableExampleColString				STRING		2
poolNestedSubtable				TABLE		

### Nested table definition

Property	
ID	124624
Name	poolNestedSubtable
Belongs to	
Property poolNestedTablesExample	
Index	
<input type="checkbox"/> Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Table
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input checked="" type="checkbox"/> Visible <input type="checkbox"/> Sum <input type="checkbox"/> Full table editing	

### Nested table fields

The screenshot shows the 'Table field' properties for a field named 'poolNestedTableColDate'. The properties are:

NAME	TYPE	LENGTH
poolNestedTableColDate	DATE	20
poolNestedTableColDecimal	DECIMAL	10
poolNestedTableColString	STRING	20

Checkboxes for 'Allow new', 'Allow update', and 'Allow delete' are checked.

### Result in web interface:

#### Empty table:

The table has three columns:

- poolTableExampleColDate
- poolTableExampleColDecimal
- poolTableExampleColString

No Data Found.

#### Adding a row

The main form fields are:

- poolTableExampleColDate: 05-06-2012
- poolTableExampleColDecimal: 125,00
- poolTableExampleColString: test

The nested table 'poolNestedSubtable' is empty and displays 'No Data Found.'

#### Adding rows to nested table

The form fields are:

- poolNestedTableColDate: 22-06-2012
- poolNestedTableColDecimal: 10,00
- poolNestedTableColString: sub1

#### After adding a few rows:

poolNestedTablesExample			
	poolTableExampleColDate	poolTableExampleColDecimal	poolTableExampleColString
05-06-2012		125,00	test
poolNestedSubtable			
poolNestedTableColDate	poolNestedTableColDecimal	poolNestedTableColString	
22-06-2012		10,00	sub1
22-06-2012		15,00	sub2
Totals:		25,00	
10-06-2012		75,00	masterrow 2
poolNestedSubtable			
poolNestedTableColDate	poolNestedTableColDecimal	poolNestedTableColString	
22-06-2012		30,00	sub3
22-06-2012		40,00	sub4
Totals:		70,00	
	Totals:	200,00	

The user can use the and buttons to expand or collapse the table rows:

poolNestedTablesExample			
	poolTableExampleColDate	poolTableExampleColDecimal	poolTableExampleColString
05-06-2012		125,00	test
poolNestedSubtable			
poolNestedTableColDate	poolNestedTableColDecimal	poolNestedTableColString	
22-06-2012		10,00	sub1
22-06-2012		15,00	sub2
Totals:		25,00	
10-06-2012		75,00	masterrow 2
	Totals:	200,00	

All rows collapsed:

poolNestedTablesExample			
	poolTableExampleColDate	poolTableExampleColDecimal	poolTableExampleColString
05-06-2012		125,00	test
10-06-2012		75,00	masterrow 2
	Totals:	200,00	

## 1.3.22 Vessel

### 1.3.22.1 Description

The vessel property is an advanced technical property to interact (read and update) with objects of other systems than Arco DocRoom.

A set of default vessel property definitions are delivered with the system. These vessel definitions make it possible to interact with other systems without programming.

- Vessel properties serve as 'vessels' for external objects. They can be used to guide external 'objects' in Arco DocRoom or to use them as linked 'external objects' to DocRoom documents/folders/dossiers/workflow items.
- The vessel framework is a .net technical framework that can be used for any kind of external object.
- By default the following vessels are installed (others can be installed when created without DocRoom upgrade):
  - o SQL vessels: allows developers to link to any sql table as an external object
  - o Sharepoint vessels: allows developers to link sharepoint objects in Arco Routing.
  - o DocRoom vessels: allow developers to link a DocRoom object
    - Folder vessel
    - Document vessel
    - Document Version vessel
    - Workflow vessel
- To expand the Arco DocRoom system and create new vessel types, the vessel base class should be implemented (See programming Guide).
- Every property and function in your vessel implementation can be used in DocRoom and routing events and buttons, to allow the steering of external objects from within routing procedures.

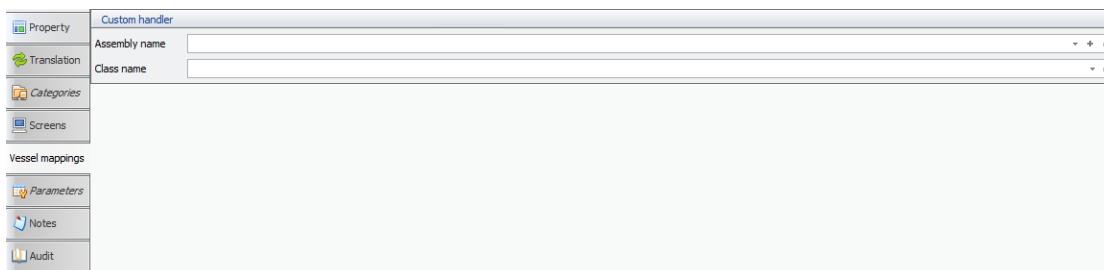
### 1.3.22.2 Configuration

### 1.3.22.3 Property parameters

Field name	Information
Default value	<i>Value that is shown by default in the field in the Doma web interface.</i>
Display Style	<b>Remark:</b> These settings apply when rendering the property in <b>writable</b> mode  <i>Inline: the property is rendered as a dropdown list</i> <i>Popup: the property is rendered as a pop-up screen with a </i>

	<i>Both: Inline and Popup are active</i>
<b>Radio buttons</b>	<p><i>Remark: Only available when Display Style = Inline.</i></p> <p><input checked="" type="checkbox"/> <i>The list items are presented as individual items with a radio button before them. If checked, the number of items per row needs to be entered</i></p> <p><input type="checkbox"/> <i>The list items are presented in a dropdown list.</i></p>
<b>Refresh on change</b>	<p><input checked="" type="checkbox"/> <i>The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.</i></p> <p><input type="checkbox"/> <i>The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.</i></p>

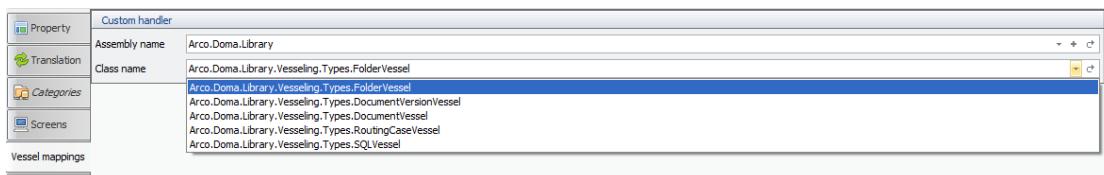
#### 1.3.22.4 Vessel Mappings



In this screen, the Vessel is selected from the Vessel framework.

Field name	Information
<b>Assembly Name</b>	<i>The .NET assembly containing the vessel implementations for the vessel types installed on the system. By default only the vessel definitions in DomaAdmin.exe in the Arco.Doma.Library is installed.</i>
<b>Class name</b>	<i>The name of the .net class implementing the vessel type</i>

The following vessel types are defined:



- Arco.Doma.Library.Vesseling.Types.FolderVessel : links to the DocRoom Folder Object
- Arco.Doma.Library.Vesseling.Types.DocumentVersionVessel : links to the DocRoom Document Version Object. The object is linked on the level of the object DIN (Document identification number)
- Arco.Doma.Library.Vesseling.Types.DocumentVessel : links to the DocRoom Document Object The object is linked on the level of the object ID (Identification number)
- Arco.Doma.Library.Vesseling.Types.RoutingCaseVessel : links to the DocRoom Workflow Object
- Arco.Doma.Library.Vesseling.Types.Sql.Vessel : links to an SQL Vessel Object



Save

After selecting the Vessel handler, click on the button to enable the needed configuration options.

In order to add fields in the vessel mappings, you first have to enter the parameters for the vessel in the Parameters Tab.

When having done that, DocRoom properties can be mapped to the Vessel properties.



Click on to add a property mapping.

Field name	Information
<b>Target property</b>	<i>Target (DocRoom) property where the Vessel Property will be mapped to.</i>
<b>Vessel Property</b>	<i>The Vessel property where the Target property will be mapped to. The</i>

	<p><i>vessel properties available depend on the vessel type and vessel parameters (see vessel parameters).</i></p> <ul style="list-style-type: none"> <li>• <i>For folder vessels: the properties of the folder category selected in the vessel parameters</i></li> <li>• <i>For document vessels: the properties of the document category selected in the vessel parameters</i></li> <li>• <i>For document version vessels: the properties of the document category selected in the vessel parameters</i></li> <li>• <i>For Workflow (Routing case) vessels: the properties of the workflow category selected in the vessel parameters</i></li> <li>• <i>For SQL Vessels: the field names of the table defined in the vessel parameters</i></li> </ul>
<b>Direction</b>	<ul style="list-style-type: none"> <li>• <i>ImportFromVessel: Data can only be imported from the vessel object for this property mapping.</i></li> <li>• <i>ExportToVessel: Data can only be exported to the vessel object for this property mapping.</i></li> <li>• <i>SynchronizeWithVessel: Data can be synchronized in both directions (import = read vessel object data, export= update vessel object data ) for this property mapping</i></li> </ul>

### 1.3.22.5 FolderVessel parameters

 Property  Translation  Categories  Screens Vessel mappings  Parameters  Notes	<p>Drag a column header here to group by that column</p> <table border="1"> <thead> <tr> <th>NAME</th><th>VALUE</th></tr> </thead> <tbody> <tr> <td>Category</td><td></td></tr> </tbody> </table>	NAME	VALUE	Category	
NAME	VALUE				
Category					
<b>Category</b>	<i>Enter the DocRoom Folder category name the vessel will connect to.</i>				

### 1.3.22.6 DocumentVersion Vessel Parameters

 Property  Translation  Categories  Screens Vessel mappings  Parameters  Notes	<p>Drag a column header here to group by that column</p> <table border="1"> <thead> <tr> <th>NAME</th><th>VALUE</th></tr> </thead> <tbody> <tr> <td>Category</td><td>PersonFiche</td></tr> </tbody> </table>	NAME	VALUE	Category	PersonFiche
NAME	VALUE				
Category	PersonFiche				
<b>Field name</b>	<b>Information</b>				
<b>Category</b>	<i>Enter the DocRoom Document category name the vessel will connect to.</i>				

### 1.3.22.7 Document Vessel Parameters

 Property  Translation  Categories  Screens  Vessel mappings  Parameters  Notes	<p>Drag a column header here to group by that column</p> <table border="1"> <thead> <tr> <th>NAME</th><th>VALUE</th></tr> </thead> <tbody> <tr> <td>&gt; Category</td><td>PersonFiche</td></tr> </tbody> </table>	NAME	VALUE	> Category	PersonFiche
NAME	VALUE				
> Category	PersonFiche				

Field name	Information
<b>Category</b>	<i>Enter the DocRoom Document category name the vessel will connect to.</i>

### 1.3.22.8 Workflow Vessel Parameters

 Property  Translation  Categories  Screens  Vessel mappings  Parameters  Notes	<p>Drag a column header here to group by that column</p> <table border="1"> <thead> <tr> <th>NAME</th><th>VALUE</th></tr> </thead> </table>	NAME	VALUE
NAME	VALUE		

No parameters are to be added.

### 1.3.22.9 Sql Vessel Parameters

 Property  Translation  Categories  Screens  Vessel mappings  Parameters	<p>Drag a column header here to group by that column</p> <table border="1"> <thead> <tr> <th>NAME</th><th>VALUE</th></tr> </thead> <tbody> <tr> <td>&gt; Connectionstring</td><td></td></tr> <tr> <td>Table</td><td>Person</td></tr> <tr> <td>Key</td><td>BusinessEntityID</td></tr> <tr> <td>Databasetype</td><td>SQLSERVER</td></tr> </tbody> </table>	NAME	VALUE	> Connectionstring		Table	Person	Key	BusinessEntityID	Databasetype	SQLSERVER
NAME	VALUE										
> Connectionstring											
Table	Person										
Key	BusinessEntityID										
Databasetype	SQLSERVER										

Field name	Information
<b>Connection String</b>	<i>Enter here the connection string to the database.</i>  <i>If the table is internal to the DocRoom database, use a . (dot).</i>  <i>Example ODBC: DSN=Arcofolder;UID=ARCO;PWD=ARCO</i> <i>Example SQLSERVER: DSN=sql2012; Trusted_Connection=yes;</i> <i>database=Adventureworks2012</i>
<b>Table</b>	<i>Enter the table/view name of the table connecting to with the vessel.</i> <i>For ExportToVessel/SynchronizeWithVessel, make sure updating this table (View) is allowed.</i>
<b>Key</b>	<i>Enter the name of the key field in the SQL table/view. The interaction with the SQL vesselled table is based on this key</i>

<b>Databasetype</b>	<i>SQLSERVER: Native database provider for SQL server ORACLE: Native Database provider for Oracle ODBC: ODBC database connection OLEDB: OLEDB database connection</i>
---------------------	---

### 1.3.22.10 Output in the web interface

#### 1.3.22.10.1 Example SQL Vessel

A sql vesseled property, combined with a lookup property allows developers to select multiple columns from the lookup table without programming. Even more (if security allows it), values for these columns can be saved back to the database without programming

#### Definition of the property:

Property  Translation  Categories  Screens  Vessel mappings  Parameters  Notes  Audit	<b>Property</b> <hr/> ID: 117510 Name: poolVesselSql <input type="checkbox"/> Virtual <hr/> <b>Belongs to</b> Pool <hr/> <b>Index</b> <input type="checkbox"/> Searchable <input checked="" type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None <input type="button" value="X"/> <hr/> Type: Vessel Default value: Display style: Inline <hr/> <b>Options</b> <input type="checkbox"/> Visible in Read-Only/Archive <input type="checkbox"/> Printable <input type="checkbox"/> Radio buttons <input type="checkbox"/> Refresh on change
---	--

#### Definition Vessel Parameters:

Drag a column header here to group by that column	
Property	NAME
Translation	ConnectionString
Categories	Table
Screens	Key
Vessel mappings	Databasetype
Parameters	

The SQLVessel connects to the internal DocRoom database, where a table Person is created.

The key of the table is 'BusinessEntityID', the database type SQLSERVER.

#### Definition Vessel Mappings:

Custom handler		
Assembly name	Arco.Doma.Library	v + c
Class name	Arco.Doma.Library.Vesseling.Types.SQLVessel	v c
Drag a column header here to group by that column		
Target Property	Vessel Property	Direction
poolFirstName	FirstName	SynchronizeWithVessel
poolLastName	LastName	SynchronizeWithVessel
poolAddress	Addressline1	SynchronizeWithVessel
poolCity	City	SynchronizeWithVessel
poolPostalCode	Postalcode	SynchronizeWithVessel
poolTitle	Title	SynchronizeWithVessel

This screen gives the DocRoom properties (TargetProperty) and their mapped SQLServer Column names (Vessel Property). In this example, all properties are synchronized with the vessel (both read and update are possible).

### Example: reading SqlServer Table data

In this example, we will show data of the PERSON table in a DocRoom document, but the only data stored in the DocRoom tables will be the key of the Person table row.

All other data related to the person, will be fetched automatically when opening the DocRoom Document.

The following DocRoom **virtual** properties are defined:

- poolFirstName
- poolLastName
- poolAddress
- poolCity
- poolPostalCode
- poolTitle

All these properties are defined as **virtual** because they are only needed to show the data on screen.

 Property	<b>Property</b> ID: 122069 Name: poolLastName <input checked="" type="checkbox"/> Virtual Belongs to
 Translation	
 Categories	
 Screens	

In this example, we also add a **virtual** lookup property on the persons table:

 Property  Translation  Lookup  Categories  Screens  Notes  Audit	<b>Property</b> ID: 122137 Name: poolSearchPerson <input checked="" type="checkbox"/> Virtual <b>Belongs to</b> <b>Pool</b> Type: Lookup Max. length: 2000 Default value: Search: Contains Parts to hide: AdvancedSearchBox, DeleteIcon Display style: Popup <b>Options</b> <input checked="" type="checkbox"/> Visible in Read-Only/Archive <input checked="" type="checkbox"/> Printable <input type="checkbox"/> Radio buttons <input type="checkbox"/> Multi select <input checked="" type="checkbox"/> Advanced <input checked="" type="checkbox"/> Refresh on change
--	--

The 'Refresh on change' is checked in order to force the system to fetch the data when the lookup data are changed.

The lookup is defined with the following parameters:

	Connection string	.		
	Table(s)	person		
	Where			
	Order by	Lastname		
	Records per page	25		
	<input type="checkbox"/> Auto load			
	<input type="checkbox"/> Open maximized			
	Fields			
Drag a column header here to group by that column				
FIELD	HEADING	SELECTION	SEARCHABLE	DISPLAY
> BusinessEntityId	Id	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PopupWindow
Lastname	Last Name	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow
FirstName	First Name	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PopupWindow

## Screen Definition

On the level of the document category, we add the above defined properties (either by selecting them from the pool, either by creating theme for this document category only). Then we add the properties to a screen for editing this document category:

Available screen items		Selected screen items				
		NAME	MODE	DEFAULT VALUE	IDENTIFIER	HALF LINE
	<input checked="" type="radio"/> Default <input type="radio"/> Read-Only <input type="radio"/> Change <input type="radio"/> Mandatory	TAB	ReadOnly	Tab VesselEx...		<input type="checkbox"/>
		poolSearchPerson	Writable		poolSearchPerson	<input type="checkbox"/>
		poolVesselSql	Writable		poolVesselSql	<input type="checkbox"/>
		poolTitle	Writable		poolTitle	<input type="checkbox"/>
		poolFirstName	Writable		poolFirstName	<input checked="" type="checkbox"/>
		poolLastName	Writable		pool.lastName	<input checked="" type="checkbox"/>
		poolAdress	Writable		poolAdress	<input type="checkbox"/>
		poolCity	Writable		poolCity	<input checked="" type="checkbox"/>
		poolPostalCode	Writable		poolPostalCode	<input checked="" type="checkbox"/>
		Update Person Data	ReadOnly			<input type="checkbox"/>

In the example, we show the vessel property on the screen. In real implementations, however, the vessel property will not be shown on screen.

## **Definition of event actions:**

On the level of the document category, we have to add the following events:

Category General Document X Startup Page Screen GeneralDocumentInsertScreen

Save Save & Close New action Delete action Refresh parameter values Expand all Collapse all Refresh Filter Close

Event actions Grid

Category	EVENT	ACTION	NOT	CONDITION
	onBeforeSave	Set Property poolVesselSql [@poolSearchPerson@]	<input checked="" type="checkbox"/>	poolSearchPersonEmpty
	Property	poolVesselSql		
	Value	[@poolSearchPerson@]		
	onLoad	Run Vessel Synchronisation poolVesselSql Import from Vessel	<input type="checkbox"/>	Always
	Vessel	poolVesselSql		
	Direction	Import from Vessel		

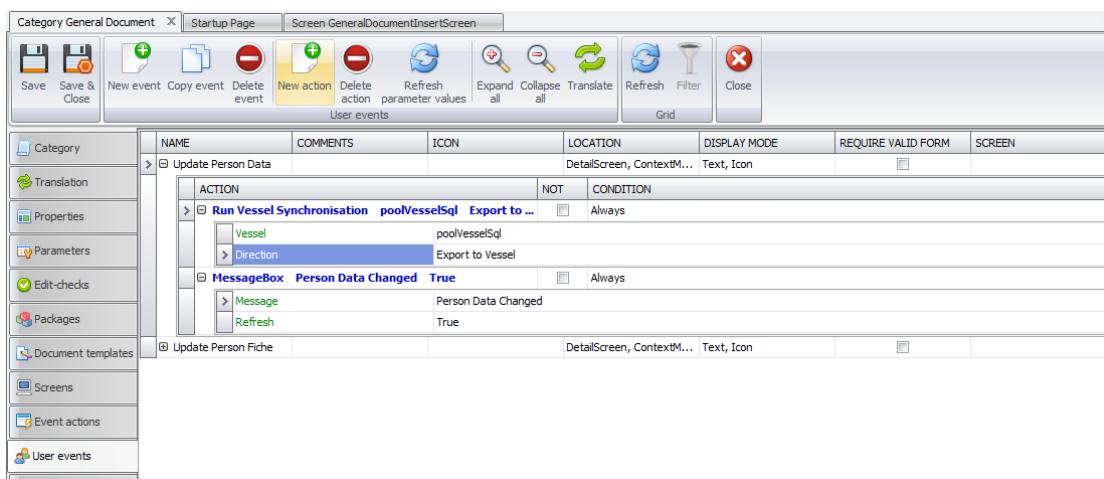
- **onBeforeSave**: the ‘Refresh on change’ of the poolSerachPerson lookup’ forces the system to do a “save-and-refresh-data” action; In the onBeforeSave event that will be

triggered at that time, we make the system copy the value of the poolSearchPerson into the poolVesselSql property, i.e. the value of the key field: **Setproperty**(**poolVesselSQL([@poolSearchPerson@])**), on condition that the search field is not empty.

- **onLoad**: all properties except the vessel property are virtual properties, i.e. the values of the properties are not stored in the DocRoom tables. Therefore, we have to make the system fetch the values when loading the document in order to show them on screen. This is realized in the onLoad event of the document category by a **Run Vessel Synchronisation** for the poolVesselSQL property, with as parameter **Import From Vessel**

### Definition of an update button: 'Update Person Data'

For the example, we also added an update button on screen. This is realized by defining an **User Event** 'Update person data' on the document category:



The actions executed in this event:

- **Run Vessel Synchronization** on the poolVesselSQL with **ExportToVessel**', i.e. update the Sql data in the table.
- **Sending a message box** "person data Changed".

### What does it look like?

Create a new Document:

Clicking on the search button, and selecting a person's data:

**poolSearchPerson**

Search		
Last Name :	<input type="text" value="alb"/>	
First Name :	<input type="text"/>	
<input type="radio"/> and <input checked="" type="radio"/> or		<a href="#">Search</a> <a href="#">Clear</a>
<b>Your Selection :</b>		
<b>Id</b>	<b>Last Name</b>	<b>First Name</b>
1447	Alberts	Amy
15640	Albrecht	Brian
<a href="#">Previous</a> <a href="#">Next</a>		

As defined in the lookup, the key field 'BusinessEntityId' is returned; When we select Albrecht Brian', the number 15640 is returned.

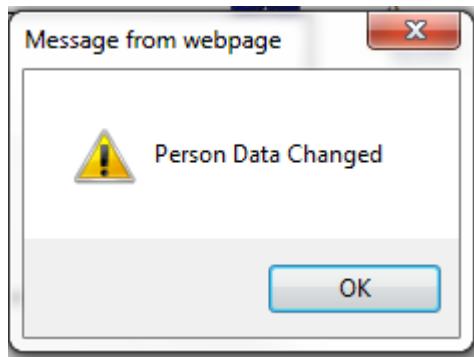
The 'refresh on change' of the lookup property, forces the system to copy the value to the SQLvessel object, and to run vessel synchronization into the virtual properties. As a result, all data are shown on screen:

Tab VesselExample	poolTAB	Tab 2	
poolSearchPerson	15640		
poolVesselSql	Heidenweg 4624, Saarbrücken, Brian, Albrecht, 66001,		
poolTitle			
poolFirstName	Brian	poolLastName	Albrecht
poolAddress	Heiderweg 4624		
poolCity	Saarbrücken	poolPostalCode	66001
<a href="#">Update Person Data</a>			

Now, let's change the value of the Title field to 'Mr.'

Tab VesselExample	poolTAB	Tab 2	
poolSearchPerson	15640		
poolVesselSql	Heidenweg 4624, Saarbrücken, Brian, Albrecht, 66001,		
poolTitle	Mr.		
poolFirstName	Brian	poolLastName	Albrecht
poolAddress	Heiderweg 4624		
poolCity	Saarbrücken	poolPostalCode	66001
<a href="#">Update Person Data</a>			

And click the **Update Person Data** button. The user event defined behind the button, makes the system to Run Vessel synchronization with update mode (ExportFromVessel), update the Sql table data en send a message:



### 1.3.23 Webservice

#### 1.3.23.1 Description

The web service property allows the user to create lookups based on data provided by a web service

When using a web service property, DocRoom will generate a .net proxy dll that implements the necessary code for calling the web service.

The web service called will have to return an array of string values. The use of the .net Dataset type is not possible.

#### 1.3.23.2 Configuration

##### 1.3.23.2.1 Property parameters

Field name	Information
<b>Default value</b>	<i>Value that is shown by default in the field in the Doma web interface.</i>
<b>Parts to hide</b>	<p><b>Remark:</b> These settings apply when rendering the property in <b>writable mode</b></p> <p><input checked="" type="checkbox"/> (Select all): all options below are checked</p> <p><input checked="" type="checkbox"/> AdvancedSearchBox: the property is rendered with a  button and a pop-up window to make a selection (only in combination with multi select option)</p> <p><input type="checkbox"/> AdvancedSearchBox: no popup window available</p> <p><input checked="" type="checkbox"/> SelectedBox: the selected values of the property are rendered in a table</p> <p><input type="checkbox"/> SelectedBox: no table is shown for the selected values</p> <p><input checked="" type="checkbox"/> DeleteIcon: an  icon is added to be able to delete entries in the table with selections, applicable if <input checked="" type="checkbox"/> SelectedBox is checked</p> <p><input type="checkbox"/> DeleteIcon: no  is rendered. Deletion is not possible from the selected values.</p> <p>If no option is checked, 'None' is displayed in DomaAdmin</p>
<b>Display Style</b>	<b>Remark:</b> These settings apply when rendering the property in <b>writable mode</b>

	<p><i>Inline: the property is rendered as a dropdown list</i></p> <p><i>Popup: the property is rendered as a pop-up screen with a  button</i></p> <p><i>Both: Inline and Popup are active</i></p>
<b>Radio</b>	<input checked="" type="checkbox"/> <i>The list items are presented as individual items with a radio button before them.</i> <input type="checkbox"/> <i>The list items are presented in a dropdown list.</i> <b>Remark:</b> If this option is combined with multi select, the radio buttons are replaced by check boxes.
<b>Multi select</b>	<input checked="" type="checkbox"/> <i>The end user can select more than one item out of the list.</i> <input type="checkbox"/> <i>Only one item of the list can be selected by the end user.</i>
<b>Refresh on change</b>	<input checked="" type="checkbox"/> <i>The screen in the web interface will be automatically saved and refreshed when the end user selects a new value in this field.</i> <input type="checkbox"/> <i>The screen in the web interface will not be automatically saved and refreshed when the end user selects a new value in this field.</i>

### 1.3.23.2.2 Tab Lookup

Field name	Information
<b>URL</b>	<i>The URL to be used when calling the web service</i>
<b>DLL</b>	<i>The full path name for the .net proxy dll generated based on the web service</i>
<b>Create DLL</b>	<i>Click on this button in order to generate the .net proxy dll that implements the necessary code for DocRoom in order to call the web service</i>
<b>Service name</b>	<i>The name of the web service</i>
<b>Method</b>	<i>The method of the web service to be called</i>
<b>Records per page</b>	<i>The number of records shown in the pop-up at a time.</i>
<b>Auto Load</b>	<input checked="" type="checkbox"/> <i>not applicable</i>

	<input type="checkbox"/> <i>not applicable</i>
<b>Open maximized</b>	<input checked="" type="checkbox"/> <i>The popup window opens in a maximized screen (if applicable)</i> <input type="checkbox"/> <i>The popup window opens in a dynamically calculated size (if applicable)</i>

### 1.3.23.2.3 Parameter mapping

The parameter mapping is applicable if het method being called in the web service requires a parameter.

This zone defines the parameter mapping between DocRoom and the method of the web service.

Click on 'New parameter' in order to add a new parameter field

Field name	Information
<b>NAME</b>	<i>Name of the parameter</i>
<b>VALUE</b>	<i>The value of the parameter when calling the method.</i> <b>Remark:</b> you can user here references to other properties using the <i>[@prop_name@]</i> syntax.
<b>TYPE</b>	<i>STRING : for parameters of type string</i> <i>NUMBER: for parameter of type Integer/Float</i>
<b>SEARCHABLE</b>	<i>not applicable</i>

### 1.3.23.2.3.1 Fields mapping

The Fields section defines the fields of the array list, returned by the .net method, which will be shown in the selected values.

Click on 'New parameter' in order to add a new parameter field

Field name	Information
<b>FIELD</b>	<i>The name of the field as returned by the array list. Make sure that this name matches exactly to the name of the field as defined in the .net array list.</i>
<b>FIELD TYPE</b>	<i>FIELD : not applicable</i> <i>PROPERTY: not applicable</i> <i>METHOD: not applicable</i> <i>RETURN: only one that is applicable</i>
<b>HEADING</b>	<i>The header for the field rendered in the web interface</i>
<b>SELECTION</b>	<b>Remark:</b> Only one field can be checked as 'selected' <input checked="" type="checkbox"/> <i>this field is the key field of the list</i> <input type="checkbox"/> <i>no key field</i>
<b>DISPLAY</b>	<i>PopupWindow: the field is shown in the popup window (if applicable)</i> <i>DetailWindow: the field is shown in the detail table with selected values(if applicable)</i> <i>TooltipWindow: the field is shown in the tooltip window of the table with selected values (if applicable)</i> <i>(Select All): all of the above apply</i>

### 1.3.23.3 Output in the web interface

#### Definition of the Webservice

The examples shown below are based on a .net web service. The example code for this web service is added in appendix 5.

Web Service URL: <http://localhost:59626/CountryWebService.asmx>

Service name: CountryWebService

Methods:

- GetCountries(StartsWith As string) : returns a list of countries of which the name starts with the given parameter .

Returned array: a list of country names

A native call of the web service in the browser gives

The screenshot shows a Microsoft Internet Explorer window. The address bar contains the URL <http://localhost:59626/CountryWebService.asmx>. The title bar says "CountryWebService W...". The menu bar includes File, Edit, View, Favorites, Tools, Help. Below the menu is a toolbar with icons for Suggested Sites, Web Slice Gallery, Learn IIS, Visual Basic 2010 Voorbeel..., and Arco Doma. The main content area has a dark blue header "CountryWebService". Below it, a message says "The following operations are supported. For a formal definition, please review the [Service Description](#).". A bulleted list shows one operation: • [GetCountries](#).

#### Definition of the Webservice property

The screenshot shows the "Property" screen of the Arco software. On the left is a vertical toolbar with icons for Property, Translation, Lookup, Categories, Screens, Notes, and Audit. The main area is titled "Property" and contains the following fields:

ID	115337
Name	poolWebService
<input type="checkbox"/> Virtual	
Belongs to	
Pool	
Index	
Searchable	<input type="radio"/> Normal <input type="radio"/> Fulltext <input checked="" type="radio"/> None
Type	Webservice
Default value	
Parts to hide	AdvancedSearchBox
Display style	Inline
Options	
<input checked="" type="checkbox"/> Visible in Read-Only/Archive	
<input checked="" type="checkbox"/> Printable	
<input type="checkbox"/> Checkboxes	
<input checked="" type="checkbox"/> Multi select	
<input type="checkbox"/> Refresh on change	

**Parameters**

NAME	VALUE	TYPE	SEARCHABLE
> Country_name	[@poolstring@]	STRING	<input checked="" type="checkbox"/>

**Fields**

FIELD	FIELD TYPE	HEADING	SELECTION	DISPLAY
> Cname	RETURN	Name	<input checked="" type="checkbox"/>	PopupWindow, DetailWindow

### Results in:

Writable:

poolstring	<input type="text"/>
poolWebService	<input type="text"/> <input type="text"/>

Clicking on the combo bow arrow:

poolstring	<input type="text"/>
poolWebService	<input type="button" value="..."/> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> Afghanistan  Albania  Algeria  Andorra  Angola  Antigua and Barbuda  Argentina  Armenia  Australia  Austria  Azerbaijan  Bahamas, The  Bahrain  Bangladesh  Barbados  Belarus  Belgium  Belize  Benin  Bhutan </div>

After selection:

poolstring	<input type="text"/>
poolWebService	<input type="button" value="..."/> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> Australia  Fiji  Zambia </div>

In read-only screen:

poolstring	<input type="text"/>
poolWebService	<div style="background-color: #f0f0f0; padding: 5px;"> Australia  Fiji  Zambia </div>

#### Using the parameter property:

poolstring	<input type="text" value="be"/>
poolWebService	<input type="button" value="..."/> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> </div>

Clicking on the combo box, with the 'be' in the poolstring property, defined as parameter in the parameter list, results in:

poolstring	<input type="text" value="be"/>
poolWebService	<input type="text"/> <ul style="list-style-type: none"><li>Belarus</li><li>Belgium</li><li>Belize</li><li>Benin</li></ul> 

**1.4 Availability of properties in categories, procedures and dossiers**

Document Category	Folder Category	Case Category	Dossier Category	Procedure Category
Document Category properties	Folder Category properties	Case Category properties	Dossier Category properties	No Category properties
No Procedure Category properties	No Procedure Category properties	Procedure Category properties	No Procedure Category properties	Procedure Category properties
Pool properties				No Pool properties

## 1.5 Appendix Code Examples

### 1.5.1 Code lookup example code

```

Public Class Country
    Public CommonName As String
    Public FormalName As String
    Public Type As String
    Public SubType As String
    Public Sovereignty As String
    Public Capital As String
    Public CurrencyCode As String
    Public CurrencyName As String
    Public TelephoneCode As String
    Public ISO3166_1_2LetterCode As String
    Public ISO3166_1_3LetterCode As String
    Public ISO3166_1_Number As String
    Public IANA_CountryCode As String
End Class

Public Class CountryLookup
    Public Shared Function GetCountries() As Country()

        Dim Countries As New ArrayList
        Dim CurrentItem As Country

        Dim XMLDocument As New XmlDocument
        XMLDocument.Load("Countries.xml")

        Dim XMLNodeList As XmlNodeList = XMLDocument.GetElementsByTagName("country")
        For Each CountryNode As XmlNode In XMLNodeList

            CurrentItem = New Country
            With CurrentItem

                If IsNothing(CountryNode.Item("Capital")) Then
                    .Capital = ""
                Else
                    .Capital = CountryNode.Item("Capital").InnerText
                End If

                If IsNothing(CountryNode.Item("CommonName")) Then
                    .CommonName = ""
                Else
                    .CommonName = CountryNode.Item("CommonName").InnerText
                End If

                If IsNothing(CountryNode.Item("CurrencyCode")) Then
                    .CurrencyCode = ""
                Else
                    .CurrencyCode = CountryNode.Item("CurrencyCode").InnerText
                End If

                If IsNothing(CountryNode.Item("CurrencyName")) Then
                    .CurrencyName = ""
                Else
                    .CurrencyName = CountryNode.Item("CurrencyName").InnerText
                End If

                If IsNothing(CountryNode.Item("FormalName")) Then
                    .FormalName = ""
                Else
                    .FormalName = CountryNode.Item("FormalName").InnerText
                End If

                If IsNothing(CountryNode.Item("IANA_CountryCode")) Then
                    .IANA_CountryCode = ""
                Else
                    .IANA_CountryCode = CountryNode.Item("IANA_CountryCode").InnerText
                End If

                If IsNothing(CountryNode.Item("ISO3166_1_2LetterCode")) Then
                    .ISO3166_1_2LetterCode = ""
                Else
                    .ISO3166_1_2LetterCode = CountryNode.Item("ISO3166_1_2LetterCode").InnerText
                End If
            End With
            Countries.Add(CurrentItem)
        Next
    End Function
End Class

```

```

If IsNothing(CountryNode.Item("ISO3166_1_3LetterCode")) Then
    .ISO3166_1_3LetterCode = ""
Else
    .ISO3166_1_3LetterCode = CountryNode.Item("ISO3166_1_3LetterCode").InnerXml
End If

If IsNothing(CountryNode.Item("ISO3166_1_Number")) Then
    .ISO3166_1_Number = ""
Else
    .ISO3166_1_Number = CountryNode.Item("ISO3166_1_Number").InnerXml
End If

If IsNothing(CountryNode.Item("Sovereignty")) Then
    .Sovereignty = ""
Else
    .Sovereignty = CountryNode.Item("Sovereignty").InnerXml
End If

If IsNothing(CountryNode.Item("SubType")) Then
    .SubType = ""
Else
    .SubType = CountryNode.Item("SubType").InnerXml
End If

If IsNothing(CountryNode.Item("TelephoneCode")) Then
    .TelephoneCode = ""
Else
    .TelephoneCode = CountryNode.Item("TelephoneCode").InnerXml
End If

If IsNothing(CountryNode.Item("Type")) Then
    .Type = ""
Else
    .Type = CountryNode.Item("Type").InnerXml
End If

End With

Countries.Add(CurrentItem)

Next

Return DirectCast(Countries.ToArray(GetType(Country)), Country())

End Function

Public Shared Function GetCountryWithStartParameter(ByVal startsWith As String) As Country()
    Dim Countries As New ArrayList
    Dim CurrentItem As Country

    Dim XMLDocument As New XmlDocument
    XMLDocument.Load("Countries.xml")

    Dim XMLNodeList As XmlNodeList = XMLDocument.GetElementsByTagName("country")
    For Each CountryNode As XmlNode In XMLNodeList

        CurrentItem = New Country
        With CurrentItem

            If IsNothing(CountryNode.Item("Capital")) Then
                .Capital = ""
            Else
                .Capital = CountryNode.Item("Capital").InnerXml
            End If

            If IsNothing(CountryNode.Item("CommonName")) Then
                .CommonName = ""
            Else
                .CommonName = CountryNode.Item("CommonName").InnerXml
            End If

            If IsNothing(CountryNode.Item("CurrencyCode")) Then
                .CurrencyCode = ""
            Else
                .CurrencyCode = CountryNode.Item("CurrencyCode").InnerXml
            End If

            If IsNothing(CountryNode.Item("CurrencyName")) Then
                .CurrencyName = ""
            End If
        End With
    Next
End Function

```

```

        Else
            .CurrencyName = CountryNode.Item("CurrencyName").InnerXml
        End If

        If IsNothing(CountryNode.Item("FormalName")) Then
            .FormalName = ""
        Else
            .FormalName = CountryNode.Item("FormalName").InnerXml
        End If

        If IsNothing(CountryNode.Item("IANA_CountryCode")) Then
            .IANA_CountryCode = ""
        Else
            .IANA_CountryCode = CountryNode.Item("IANA_CountryCode").InnerXml
        End If

        If IsNothing(CountryNode.Item("ISO3166_1_2LetterCode")) Then
            .ISO3166_1_2LetterCode = ""
        Else
            .ISO3166_1_2LetterCode = CountryNode.Item("ISO3166_1_2LetterCode").InnerXml
        End If

        If IsNothing(CountryNode.Item("ISO3166_1_3LetterCode")) Then
            .ISO3166_1_3LetterCode = ""
        Else
            .ISO3166_1_3LetterCode = CountryNode.Item("ISO3166_1_3LetterCode").InnerXml
        End If

        If IsNothing(CountryNode.Item("ISO3166_1_Number")) Then
            .ISO3166_1_Number = ""
        Else
            .ISO3166_1_Number = CountryNode.Item("ISO3166_1_Number").InnerXml
        End If

        If IsNothing(CountryNode.Item("Sovereignty")) Then
            .Sovereignty = ""
        Else
            .Sovereignty = CountryNode.Item("Sovereignty").InnerXml
        End If

        If IsNothing(CountryNode.Item("SubType")) Then
            .SubType = ""
        Else
            .SubType = CountryNode.Item("SubType").InnerXml
        End If

        If IsNothing(CountryNode.Item("TelephoneCode")) Then
            .TelephoneCode = ""
        Else
            .TelephoneCode = CountryNode.Item("TelephoneCode").InnerXml
        End If

        If IsNothing(CountryNode.Item("Type")) Then
            .Type = ""
        Else
            .Type = CountryNode.Item("Type").InnerXml
        End If

    End With
    If CurrentItem.CommonName.ToUpper.StartsWith(startsWith.ToUpper) = True Then
        Countries.Add(CurrentItem)
    End If

    Next

    Return DirectCast(Countries.ToArray(GetType(Country)), Country())
End Function
End Class

```

## 1.5.2 External lookup, single select example code

### 1.5.2.1 SelectSalesPersonExample.aspx File

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="SelectSalesPersonExample.aspx.vb"
Inherits="SelectSalesPersonExample" MasterPageFile="~/masterpages/Toolwindow.master" %>
<asp:Content ID="Content1" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">

<H4>Please select sales person</h4>

<table width="400" cellspacing=0 cellpadding=0 border=0>
<tr id="row0">
    <td width="50"><a href="JavaScript:Select( 'Carol Cummings','Carol Cummings' )">0</a></td>
    <td width="250"><a href="JavaScript:Select( 'Carol Cummings','Carol Cummings' )">Carol Cummings</a></td>
    <td width="100"><a href="JavaScript:Select( 'Carol Cummings','Carol Cummings' )">555-7890</a></td></tr>
<tr id="row1">
    <td width="50"><a href="JavaScript:Select( 'Jane Doe','Jane Doe' )">1</a></td>
    <td width="250"><a href="JavaScript:Select( 'Jane Doe','Jane Doe' )">Jane Doe</a></td>
    <td width="100"><a href="JavaScript:Select( 'Jane Doe','Jane Doe' )">555-1234</a></td></tr>
<tr id="row2">
    <td width="50"><a href="JavaScript:Select( 'Joe Shmoe','Joe Shmoe' )">2</a></td>
    <td width="250"><a href="JavaScript:Select( 'Joe Shmoe','Joe Shmoe' )">Joe Shmoe</a></td>
    <td width="100"><a href="JavaScript:Select( 'Joe Shmoe','Joe Shmoe' )">555-1212</a></td></tr>
<tr id="row3">
    <td width="50"><a href="JavaScript:Select( 'Bill Williams','Bill Williams' )">3</a></td>
    <td width="250"><a href="JavaScript:Select( 'Bill Williams','Bill Williams' )">Bill Williams</a></td>
    <td width="100"><a href="JavaScript:Select( 'Bill Williams','Bill Williams' )">555-7890</a></td></tr>
</table>

<script language="javascript" type="text/javascript" >
function RefreshOpener()
{
    MainPage().RefreshOnChange();
}
function SaveClose(){
    RefreshOpener();
}

function Select(val,caption){
    MainPage().GetContentWindow().AddValue<%=msPropID%>_0(val,caption);
    <%if not mbMultiSelect or mbAutoSelect then%>

        <%if mbRefreshOnChange then%>
            RefreshOpener();
        <%end if%>
        Close();
    <%end if %>

    function Clear(){
        MainPage().document.ident.temp<%=msPropID%>_0.value = "";
        MainPage().document.ident.workflProp<%=msPropID%>_0.value = "";
    <%if not mbMultiSelect then%>

        <%if mbRefreshOnChange then%>
            RefreshOpener();
        <%end if%>
        Close();
    <%end if%>
    }
    </script>
</asp:Content>
```

### 1.5.2.2 SelectSalesPersonExample.vb File

```
Partial Class SelectSalesPersonExample
    Inherits System.Web.UI.Page
    Protected msPropID As String
    Protected mbRefreshOnChange As Boolean
    Protected mbMultiSelect As Boolean
    Protected msAutovallidate As String
    Protected mbAutoSelect As Boolean = False
```

```

Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
    msPropID = Request("PROP_ID")

    Dim loProp As Arco.Doma.Library.baseObjects.DM_PROPERTY =
    Arco.Doma.Library.baseObjects.DM_PROPERTY.GetProperty(CType(msPropID, Int32))
    Page.Title = "Sales Persons list"

    mbRefreshOnChange = loProp.PROP_ROC

    mbMultiSelect = (loProp.VALUE_NUMBER = 1)

    If Not Page.IsPostBack Then
        msAutovalidate = Request("autovalidate")
    End If

    'load the data

    If mbAutoSelect Then
        Me.Page.ClientScript.RegisterStartupScript(Me.GetType, "autoselect", "Select(1);", True)
    End If

End Sub
End Class

```

### 1.5.3 External lookup, Multi select example code

#### 1.5.3.1 SelectSalesPersonExampleMulti.aspx File

```

<%@ Page Language="VB" AutoEventWireup="false" CodeFile="SelectSalesPersonExampleMulti.aspx.vb"
Inherits="SelectSalesPersonExampleMulti" MasterPageFile="~/masterpages/Toolwindow.master" %>
<asp:Content ID="Content1" ContentPlaceHolderID="ContentPlaceHolder1" Runat="Server">

<H4>Please select sales persons</h4>

<table width="400" cellspacing=0 cellpadding=0 border=0>
<tr id="row0">
    <td width="50"><a href="JavaScript:Select( 'Carol Cummings','Carol Cummings' )">0</a></td>
    <td width="250"><a href="JavaScript:Select( 'Carol Cummings','Carol Cummings' )">Carol Cummings</a></td>
    <td width="100"><a href="JavaScript:Select( 'Carol Cummings','Carol Cummings' )">555-7890</a></td></tr>
<tr id="row1">
    <td width="50"><a href="JavaScript:Select( 'Jane Doe','Jane Doe' )">1</a></td>
    <td width="250"><a href="JavaScript:Select( 'Jane Doe','Jane Doe' )">Jane Doe</a></td>
    <td width="100"><a href="JavaScript:Select( 'Jane Doe','Jane Doe' )">555-1234</a></td></tr>
<tr id="row2">
    <td width="50"><a href="JavaScript:Select( 'Joe Shmoe','Joe Shmoe' )">2</a></td>
    <td width="250"><a href="JavaScript:Select( 'Joe Shmoe','Joe Shmoe' )">Joe Shmoe</a></td>
    <td width="100"><a href="JavaScript:Select( 'Joe Shmoe','Joe Shmoe' )">555-1212</a></td></tr>
<tr id="row3">
    <td width="50"><a href="JavaScript:Select( 'Bill Williams','Bill Williams' )">3</a></td>
    <td width="250"><a href="JavaScript:Select( 'Bill Williams','Bill Williams' )">Bill Williams</a></td>
    <td width="100"><a href="JavaScript:Select( 'Bill Williams','Bill Williams' )">555-7890</a></td></tr>
</table>

<script language="javascript" type="text/javascript" >
function RefreshOpener()
{
    MainPage().RefreshOnChange();
}
function SaveClose(){
    RefreshOpener();
}

function Select(val,caption){
    MainPage().GetContentWindow().AddValue<%=msPropID%>_0(val,caption);
    <%if not mbMultiSelect or mbAutoSelect then%>

    <%if mbRefreshOnChange then%>
        RefreshOpener();
    <%end if%>
    Close();
    <%end if %>
}

```

```
function Clear(){  
MainPage().document.ident.temp<%=msPropID%>_0.value = "";  
MainPage().document.ident.workflProp<%=msPropID%>_0.value = "";  
<%if not mbMultiSelect then%>  
  
<%if mbRefreshOnChange then%>  
    RefreshOpener();  
<%end if%>  
    Close();  
<%end if%>  
  
}  
</script>  
  
</asp:Content>
```

### 1.5.3.2 SelectSalesPersonExampleMulti.aspx.vb file

```
Partial Class SelectSalesPersonExampleMulti  
    Inherits System.Web.UI.Page  
    Protected msPropID As String  
    Protected mbRefreshOnChange As Boolean  
    Protected mbMultiSelect As Boolean  
    Protected msAutovalidate As String  
    Protected mbAutoSelect As Boolean = False  
  
    Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load  
        msPropID = Request("PROP_ID")  
  
        Dim loProp As Arco.Doma.Library.baseObjects.DM_PROPERTY =  
        Arco.Doma.Library.baseObjects.DM_PROPERTY.GetPROPERTY(CType(msPropID, Int32))  
        Page.Title = "Sales Persons list"  
  
        mbRefreshOnChange = loProp.PROP_ROC  
  
        mbMultiSelect = (loProp.VALUE_NUMBER = 1)  
  
        If Not Page.IsPostBack Then  
            msAutovalidate = Request("autovalidate")  
        End If  
  
        'load the data  
  
        If mbAutoSelect Then  
            Me.Page.ClientScript.RegisterStartupScript(Me.GetType, "autoselect", "Select(1);", True)  
        End If  
  
    End Sub  
End Class
```

#### 1.5.4 Web service example code

```
Imports System.Web.Services
Imports System.Web.Services.Protocols
Imports System.ComponentModel

Imports System.Data
Imports System.Data.SqlClient

' To allow this Web Service to be called from script, using ASP.NET AJAX, uncomment the following line.
' <System.Web.Script.Services.ScriptService()> _
<System.Web.Services.WebService(Namespace:="http://tempuri.org/")> _
<System.Web.Services.WebServiceBinding(ConformsTo:=WsiProfiles.BasicProfile1_1)> _
<ToolboxItem(False)> _
Public Class CountryWebService
    Inherits System.Web.Services.WebService

    <WebMethod()> Public Function GetCountries(ByVal Country_name As String) As String()
        Dim dsn As String = "Server=armepc52;trusted_connection=True;database=DocRoom6;"
        Dim myconnection As SqlConnection = New SqlConnection(dsn)
        Dim mycommand As SqlDataAdapter
        Dim StringArray As String()
        If Country_name = "" Then
            mycommand = New SqlDataAdapter("select [Common Name] from country where country.Type = 'Independent State' order by [Common Name]", myconnection)
        Else
            mycommand = New SqlDataAdapter("select [Common Name] from country where UPPER([Common Name]) like '" & Country_name.ToUpper & "%' AND country.Type = 'Independent State' order by [Common Name]", myconnection)
        End If

        Dim ds As New DataSet()
        mycommand.Fill(ds, "[Common Name]")
        Dim index As Integer = 0

        For Each elem As DataRow In ds.Tables(0).Rows
            ReDim Preserve StringArray(index)
            StringArray(index) = elem.Item("Common Name")
            index = index + 1
        Next

        Return StringArray
    End Function

End Class
```

## 2 Edit-Checks

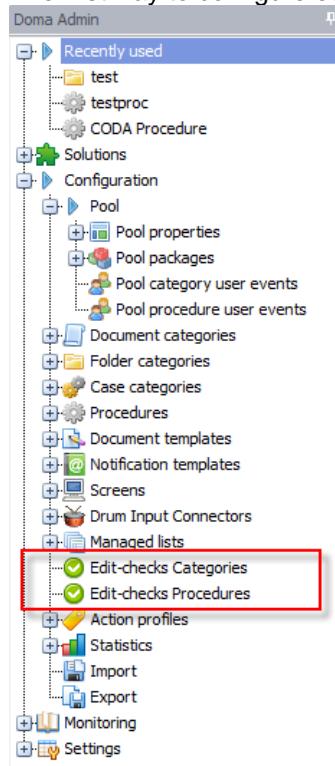
Edit-checks can be defined on both category and procedure level. It is an easy way to configure validation checks on the data that has been filled in by the user. In this chapter we will explain on how to configure edit-checks and the easiest way to link them to categories or procedures.

### 2.1 Configuring edit-checks

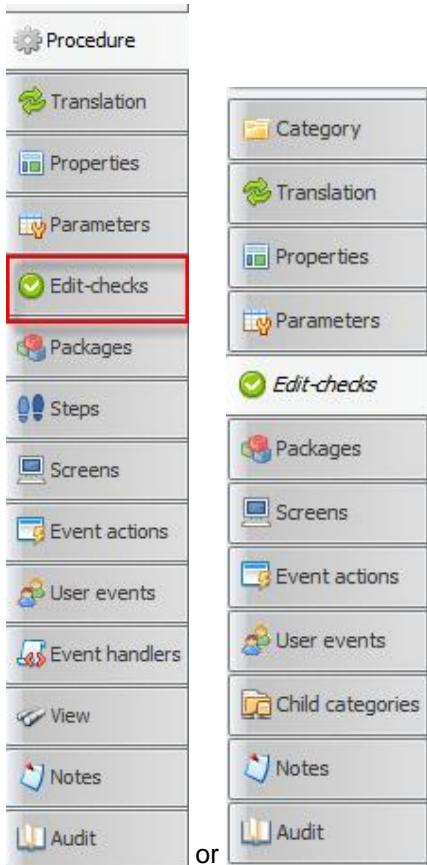
#### 2.1.1 Edit-checks overview

You can define an edit-check in multiple places. Depending on what you want to run the edit-checks on, you select a procedure or category edit-check. A procedure edit-check will be used when checks need to happen while running a procedure. A category edit-check will be used when the data is checked while creating or editing folders or documents.

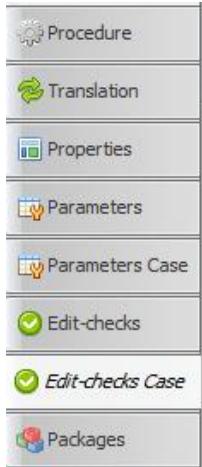
The first way to configure edit-checks is via the direct links in the doma admin tree interface.



Another way is to define them directly on the procedure or category via the foreseen edit-checks tab.



When you have defined a case category, you can choose to define an edit-check on procedure or case category level. When you have defined procedure properties that you want to use in your edit-checks, you need to select the first.



After selecting one of the above options, a grid will be presented with all the existing edit-checks matching the criteria.

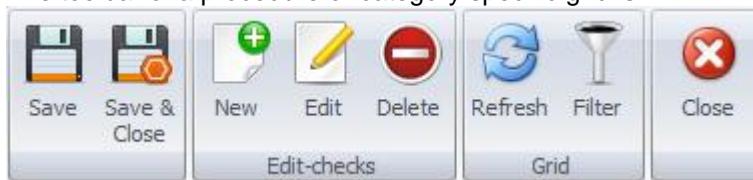
There is a small difference in the toolbar if you want to view the global grid (via the DomaAdmin tree) or the category/procedure specific grid.

The toolbar of the global grid is:



Button	Description
New	Create a new edit-check
Edit	Edit an existing edit-check
Copy	Copy the selected edit-check and give it a new name
Delete	Delete an existing edit-check
Open Query Types	Open all the defined query types
Close	Close this view

The toolbar of a procedure or category specific grid is:



Button	Description
Save	Save the category/procedure
Save & Close	Save and close the category/procedure
New	Create a new edit-check
Edit	Edit an existing edit-check
Delete	Delete an existing edit-check
Refresh	Refresh the values of the grid
Filter	Define a filter on the grid
Close	Close this view

## 2.1.2 Defining an edit-check

### 2.1.2.1 New edit-check

#### 2.1.2.1.1 Global



Item	Description
Save & Close	Save and close the edit-check

<b>Close</b>	Close without saving any changes
<b>Identification</b>	Code that defines the edit-check (max. 20 characters)
<b>Name</b>	Name of the edit-check

### 2.1.2.1.2 Tab Edit-Check

The screenshot shows the 'Edit-Check' configuration dialog. The 'Type' tab is active. The 'Group' field contains 'Test'. The 'Query type' field is set to 'Test-QT'. The 'Level' field is set to 'FIELD'. The 'Object' field is 'testproc' and the 'Property' field is 'Eerste datum'. A checked checkbox labeled 'Blocking' is present. Below these fields is a large text area labeled 'Error message' which is currently empty.

Item	Description	
<b>Group</b>	Group that the edit-check is linked to. An edit-check can only be linked to one group. You can have different groups per category or procedure. For an overview of the groups, select the '...' button. Go to 2.1.2.2.	
<b>Query Type</b>	Query type that the edit-check is linked to. The list is already filtered, depending on the group that has been selected. An edit-check can only be linked to one query type. For an overview of the query types, select the '...' button. Go to 2.1.2.32.1.2.3.	
<b>Level</b>	<b>FIELD</b>	Edit-check based on one field
	<b>DOCUMENT</b>	Edit-check based on multiple fields in one document/object
	<b>COLLECTION</b>	Obsolete
	<b>GENERIC</b>	Obsolete
<b>Object</b>	The name of the category or procedure that the edit-check is used for.	
<b>Property</b>	The property that the edit-check will be raised on.	
<b>Blocking</b>	When the box is selected, the edit-check will become a mandatory one and the error message will be shown in red. A blocking edit-check won't allow a release in a routing case or a save in a category when the edit-check validation is done at that moment.	
<b>Error Message</b>	Error message that will be shown when the edit-check result is false. The message can only be defined once for all languages.	

### 2.1.2.1.3 Tab Type

#### 2.1.2.1.3.1 Type MFU

Edit-check	Type	MFU
Type	MFU	
	<input type="checkbox"/> Mandatory	
	<input type="checkbox"/> Format	
Condition	<input type="checkbox"/> Unique	

Item	Description
<b>Mandatory</b>	Property is mandatory
<b>Format</b>	Property must match the regular expression that has been defined on the property. Only valid for string fields.
<b>Unique</b>	A multi-select value field may only contain one result.

#### 2.1.2.1.3.2 Type must be empty

Type	MUST BE EMPTY
------	---------------

The field must be empty when validating.

#### 2.1.2.1.3.3 Type comparison

Comparison				
<input type="button"/>	<input type="button"/> =	<input type="button"/>	<input type="button"/> and	<input type="button"/>

The first dropdown box allows you to make the comparison negative by selecting NOT. The second dropdown box contains a few comparison operators:

Operator	Description
=	Equals
<	Smaller than (numeric or date comparisons)
>	Greater than (numeric or date comparisons)
<=	Smaller than or equal to (numeric or date comparisons)
>=	Greater than or equal to (numeric or date comparisons)
BETWEEN	Between Field1 and Field2 (numeric or date comparisons)
IN	A selection of values. The values must be semi-column (;) separated.

The third and fourth (if applicable) dropdown box contain the value you want to compare the property with. The property can be compared with an existing property, a string or numeric value or a fixed property value.

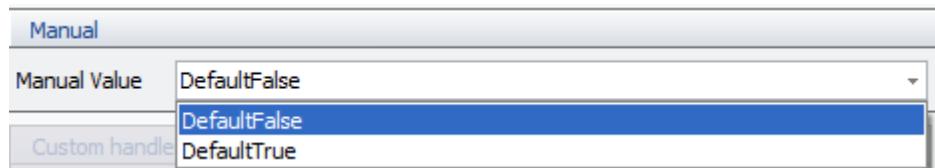
For an existing property use the following syntax: [@Property Name@]

For a string or numeric value, write the value in the field.

For a fixed value, choose one of the following:

Type	Description
<b>Case</b>	#TECH_ID#, #CASE_ID#, #STEP_EXECUTOR#, #CASE_NAME#, #USER_STARTER#, #CASE_DUE#, #CASE_START#, #STEP_START#, #STEP_DUE#, #STEP_NAME#, #PROC_NAME#
<b>Object</b>	#OBJ_ID#, #OBJ_DIN#, #CAT_ID#, #OBJ_NAME#, #CREATED_BY#, #PARENT_OBJ_ID#
<b>Fixed</b>	#DATE_NOW#, #DATE#, #YYYY#, #YY#, #MM#, #MMM#, #MMMM#, #DD#, #DDD#, #DDD#, #LANGCODE#, #USER_LOGIN#

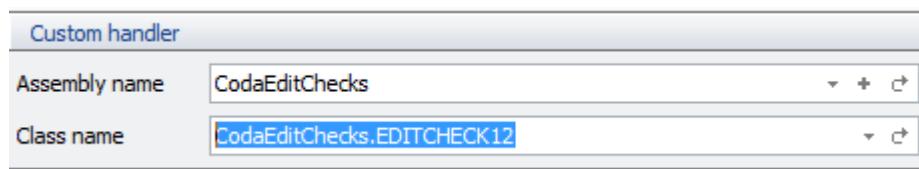
#### 2.1.2.1.3.4 Type manual value



Add a manual edit-check.

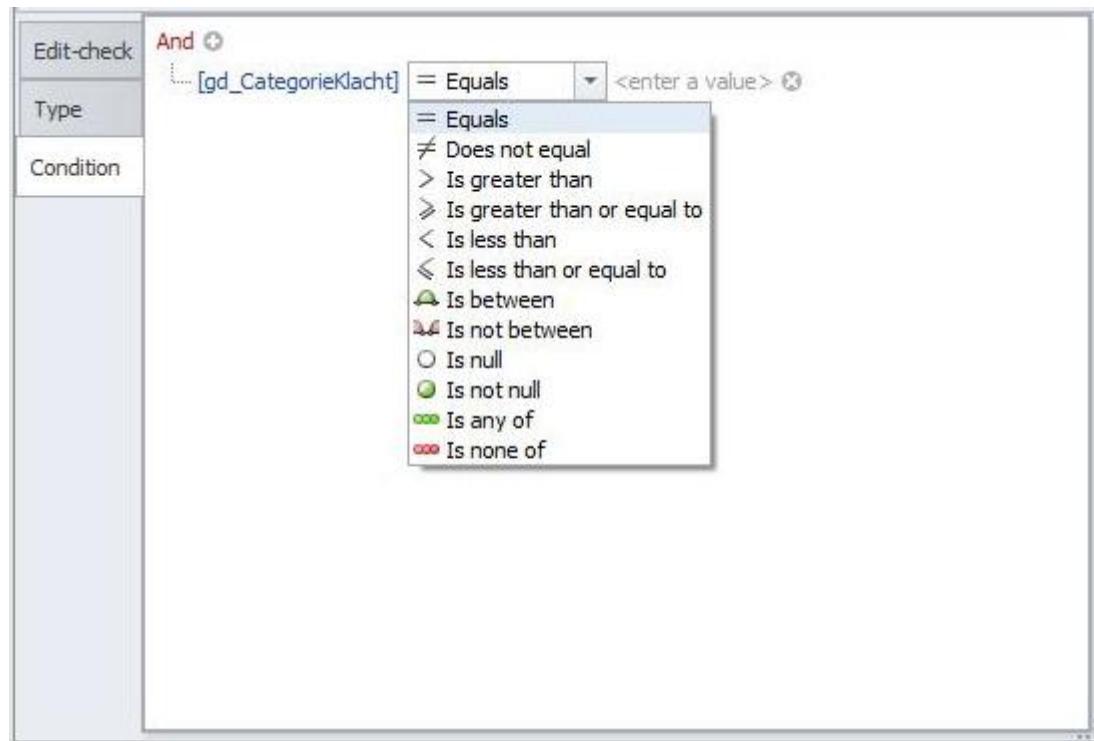
- DefaultFalse will always return false and will show the edit-check when called. When the DefaultFalse edit-check is put to blocking, it will always stop the user from releasing a workflow case or saving an object when the validation is done at this level.
- DefaultTrue will always show the edit-check as warning, so it needs to be checked manually.

#### 2.1.2.1.3.5 Type custom



A custom handler can be created to add edit-checks via coding. The handler must inherit from the class 'Arco.Doma.Library.EditChecks.ICustomEditCheck.ExecuteCheck' and has to return false or true.

#### 2.1.2.1.4 Tab Condition



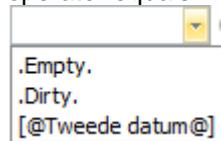
On top of the conditions you can select between 'And' and 'Or'. This means that all the conditions that are specified are linked by this selection.

The first value of the condition is a property.

The second value of the condition is an operator.

Operator	Description
=	Equals
≠	Does not equal
>	Is greater than (numeric or date comparisons)
≥	Is greater than or equal to (numeric or date comparisons)
<	Is less than (numeric or date comparisons)
≤	Is less than or equal to (numeric or date comparisons)
Between	Is between value one and two (numeric or date comparisons)
Not Between	Is not between value one and two (numeric or date comparisons)
Is null	Is null: property value is empty
Is not null	Is not null: property is filled in
Contains	Is any of: the property must contain one of the filled-in values. You can add values with the + button
Not Contains	Is none of: the property may not contain any of the filled-in values. You can add values with the + button.

The third (and fourth, where applicable) part of the condition is the value. You can use the same values as defined in 2.1.2.1.3.3, but there is also an extra possibility when you use the operator equals.



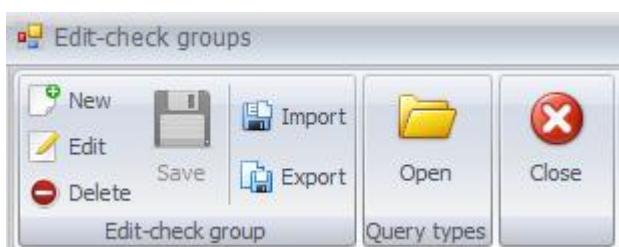
'.Empty.' has the same functionality as operator 'Is null'.

'.Dirty.' means that the property value has changed since the last save.

These values should always be used with the operator 'equals'.

## 2.1.2.2 Edit-checks groups

### 2.1.2.2.1 Overview



Button	Description
New	Create a new group
Edit	Edit an existing group
Delete	Delete an existing group
Save	Save a group
Import	Import a group from a zip-file
Export	Export a group to a zip-file
Open Query Types	Link to query types
Close	Close this view

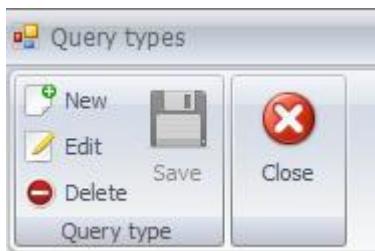
### 2.1.2.2.2 New group

Name	<input type="text"/>
Float sep.	<input type="text"/>
Date format	<input type="text"/>

Type	Description
<b>Name</b>	Name of the newly created group
<b>Float sep.</b>	The separator that is used for decimal properties: , or . When blank, the default is taken.
<b>Date format</b>	Format of the date fields. When blank, the default is taken.

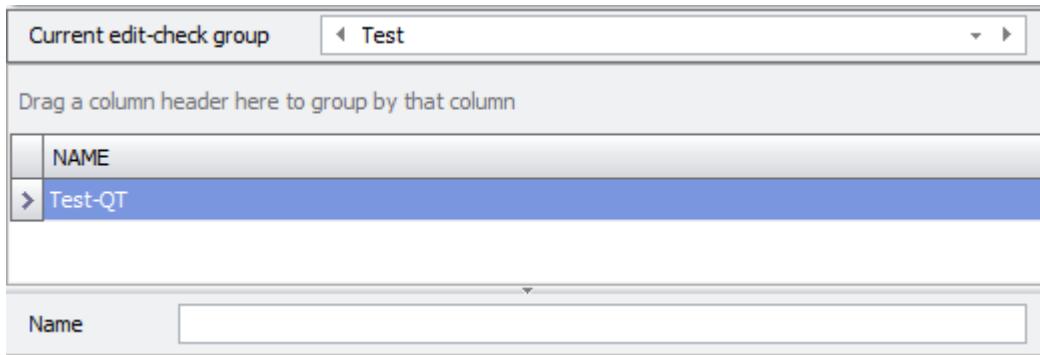
### 2.1.2.3 Query types

#### 2.1.2.3.1 Overview



Button	Description
<b>New</b>	Create a new group
<b>Edit</b>	Edit an existing group
<b>Delete</b>	Delete an existing group
<b>Save</b>	Save a group
<b>Close</b>	Close this view

#### 2.1.2.3.2 New query type



First, select the correct edit-check group you want to link the query type to, followed by giving it a name. It is best to define a name based on the group. You can have multiple query types per group, so you can divide your edit-checks depending on the type and the place they need to be executed.

## 2.2 Using edit-checks

### 2.2.1 Procedure level

#### 2.2.1.1 Event Actions

Step	EVENT	ACTION	NOT	CONDITION
	> onKeep	Perform Edit Checks Test-QT Test All True	<input checked="" type="checkbox"/>	Always
	> Query Type	Test-QT		
	Group	Test		
	Level	All		
	Continue on error	True		

Screen items

Screen actions

Validation script

Event actions

You can add an action of type 'Perform Edit Checks' to an event. You can use this action on any event. The only event where the action will act slightly differently is for the 'OnExit' event. A release will be stopped once one or more blocking edit checks return false.

The parameters of the action are:

Parameter	Description	
<b>Query Type</b>	Select one of the specified query types or use 'All' when no filter on query types needs to be defined.	
<b>Group</b>	Select one of the specified groups or use 'All' when no filter on groups needs to be defined.	
<b>Level</b>	ALL	Both field and document
	Field	Only edit-checks with level 'Field' will be executed
	Object	Only edit-checks with level 'Document' will be executed
<b>Continue on error</b>	When this is put to false, the program will send a message to the user in a popup box when one or more edit-checks were not successful. When this is put to true, the user won't be directly notified and will need to check the edit-checks overview.	

You can also use the event action in a user event and make it available in the toolbar of a case.

#### 2.2.1.2 Screens

To see an overview of all the performed edit-checks, make sure the fixed property 'Edit Checks' is put on the screen. It will show all the messages from the failed edit-checks.

NAME	MODE	DEFAULT VALUE	DUTCH	FRENCH	ENGLISH	IDENTIFIER	HALF LINE
Procedure	ReadOnly					Procedure	<input type="checkbox"/>
Step	ReadOnly					Step	<input type="checkbox"/>
Case name	Writable					Case name	<input type="checkbox"/>
Edit Checks	ReadOnly					Edit Checks	<input type="checkbox"/>

## 2.2.2 Category level

### 2.2.2.1 Event Actions

	EVENT	ACTION	NOT	CONDITIC
	I onBeforeSave	Perform Edit Checks Test-QT Test All True	<input type="checkbox"/>	Always
	Query Type	Test-QT		
	Group	Test		
	Level	All		
	Continue on error	True		

The sidebar on the left shows categories like Category, Translation, Properties, Parameters, Edit-checks (which is selected), Packages, Screens, and Event actions.

You can add an action of the type 'Perform Edit Checks' to any event of a category. The parameters of the action are the same as described above in the procedure part.

When one or more edit-checks failed while executing the action, it will stop the event in some cases. This will happen when selecting OnBeforeSave, OnBeforeInsert, OnCheckin, onDelete and OnBeforeMove as an event. When selecting OnBeforeSave, only the changed properties will be tested for edit-checks. For OnAfterSave all edit-checks are executed.

The action can also be used in an event handler that has been linked to the toolbar.

### 2.2.2.2 Screens

	NAME	MODE	DEFAULT VALUE	IDENTIFIER	HALF LINE
	Name	Writable		Name	<input type="checkbox"/>
	Category	ReadOnly		Category	<input type="checkbox"/>
I	Edit Checks	ReadOnly		Edit Checks	<input type="checkbox"/>

Add the fixed item Edit Checks on the insertupdatedetail screen if you want to see the result of the edit-checks. Blocking edit-checks will be shown in red.