List of attributes

Attributes represent additional information which can be defined and assigned to objects available in the system (e.g., items, customers/vendors/invoices etc.). Each attribute has specific type. Depending on selected attribute type, a user can define its format, predefined value and/or directory value.

The list of attributes is available from the level of the menu *Configuration → General → Attributes*

List of attributes

The list of attributes is divided into two tabs: *Attributes* and *Objects* llists
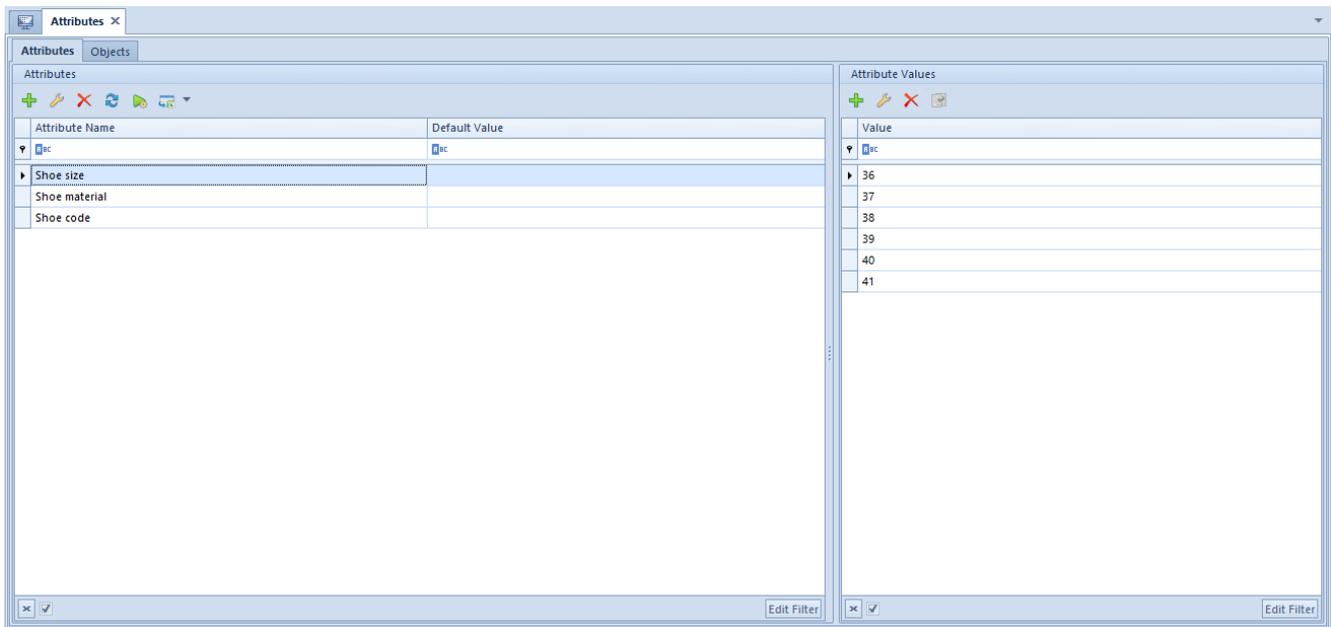
Tab Attributes

The tab *Atrributes is divided into two sections:*

- **List of attributes** ⬜ contains all attributes defined in the system along with their basic data: name and predefined value
- **List of attribute values** – contains values defined for

attributes of *List* or *Directory* type

If the list of attributes contains multi-company attributes, an additional section, *Comapny Structure,* is displayed, which allows for previewing all attribute values assigned within a given company.
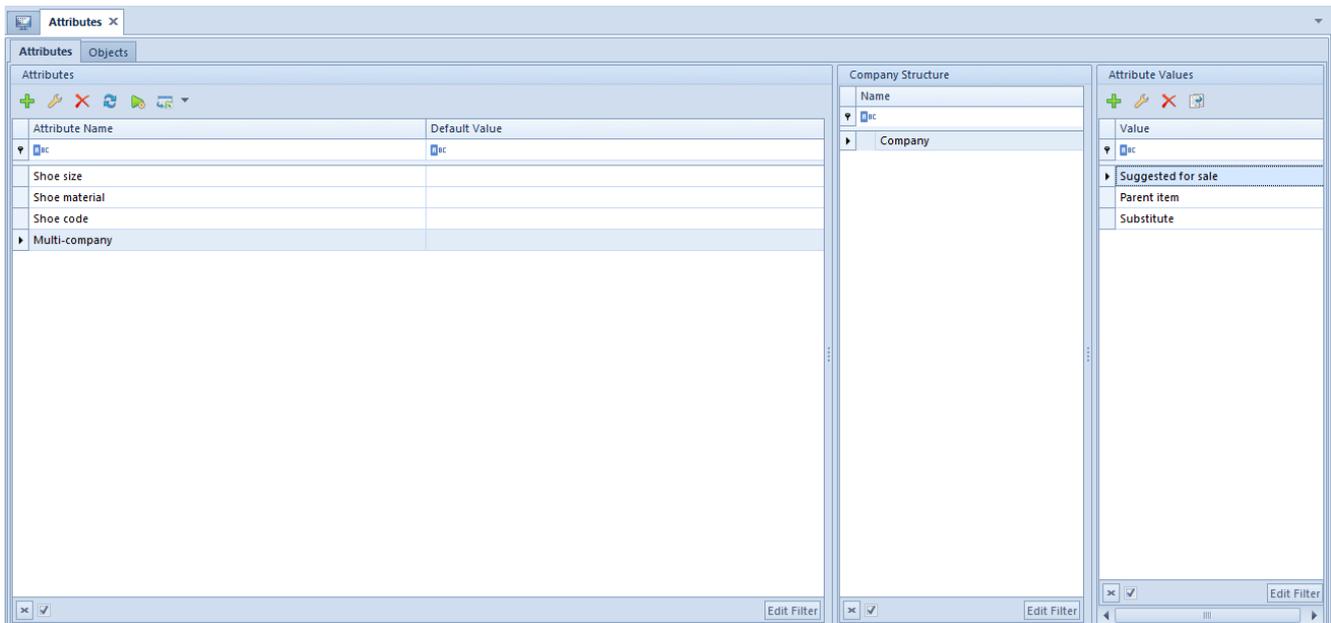
Multi-company attribute on the list of attributes

The section *Company Structure* presents all company structure units defined in the system.

After marking with the cursor a given company, all values assigned to attributes within that company appear along with predefined value, provided that it was defined.

If there are several companies marked in the window, all values of attributes common for the selected   companies are displayed on the list of attribute values. A default value is however displayed only if it is the same for all the highlighted companies. In case of entering/removing an attribute value, it will be added/deleted for   all of the marked companies.

Values of a not materialized multi-company attribute of *Directory* type can only be added and removed with the use of

the buttons [**Attach**] and [**Detach**]. Dateiled information regarding materialization of an attribute can be found [here.](#)

Values of a multi-company attribute of *List* or *Directory* type can be copied between companies. To copy an attribute value, highlight given attribute value on the list of attribute values (from the level of indicated company) and then click on the button [**Copy**].
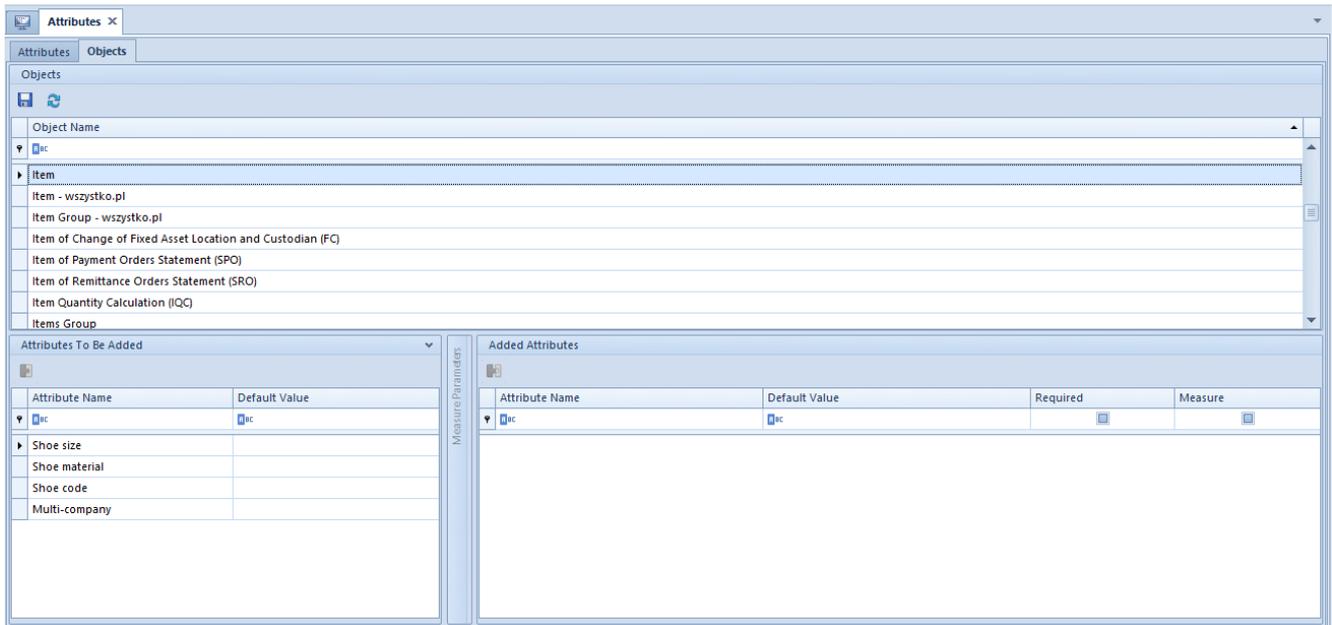
Objects tab

The tab contains all system objects to which it is possible to assign attributes.

The list of objects is divided into three sections:

- *List of objects* with names of particular objects
- *Attributes To Be Added* with attributes which can be added to an object
- *Added Attributes* with attributes assigned to a given object

The list of attributes associated with a given object is composed of the following columns:

- **Attribute Name** — value retrieved from the attribute

definition
- **Measure** — parameter available for analytical attributes, allows for parametrizing a measure to ensure that attributes are properly uploaded to BI (Business Intelligence) module
- **Required** — if the parameter is checked, field in the column *Default Value* will be mandatory
- **Default Value** — value retrieved from the attribute definition with a possibility of changing

Note
Depending on a selected object, the columns on the attribute list may differ. For instance, if parameter C*ooperate with Comarch ERP Standard HR* (available only in Polish version of database) is checked from the level of *System → Configuration → Computer,* then an additional column *Synchronized with Comarch ERP Altum HR* appears for *Employee* object. Checking the parameter allows for synchronization of a given attribute values from Comarch ERP Altum HR system.

Defining an attribute

Defining an attribute

A new attribute can be added by clicking on [**Add**] button on the list of attributes.

New attribute form

Name is a mandatory field whose value must be unique and can be composed of up to 50 characters (letters and digits). A user can also define translations of names into languages available in the system. Name field is a context field — the entered name is given in language selected from the drop-down list located on the right side of the field. The field *InternalName* may be used to identify an attribute class and it also must be unique for each attribute. By default, the value of this field is retrieved from the field *Name,* not including special characters.

Other data regarding attribute must be defined in section *Data Type and Format.*

- **Type** — type of attribute value:
  - *Text* — any sequence of characters
  - *Number* — positive or negative number
  - *Directory* — an existing generic directory is assigned to the attribute a one of its values will constitute the value of the attribute

Hint
In the system, it is possible to materialize a directory

assigned to an attribute of *Directory* type. If a directory is not materialized, attribute values are then updated each time changes are made to the directory values. If this being the case, it is not possible to add other values to the same attribute. However, after a directory is materialized, its values will be assigned to an attribute, but all changes made to directory values will have no effect on the attribute values. Similarly, values added to an attribute will also have no effect on directory values.

In order to materialize a directory assigned to an attribute of *Directory* type, on the edited attribute form, click the button [**Materialize**] from the *Directories* button group.

- *Logic Value* – selection button
- *List* – selected item from the list of values defined by the user. New values cannot be added to the list if the parameter *Closed list* has been checked
- *Date* –in format: yyyy-mm-dd
- *Customer/Vendor* – if selected, attribute value will be a customer/vendor selected from the list of customers/vendors defined in the system
- *Employee* – if selected, attribute value will be an employee selected from the list of employees defined in the system
- *Binary Data* – if selected, attribute value will be a graphic file from the object form, to which the user assigned an attribute of that type
- *Item* – if selected, attribute value will be an item selected from the list of items defined in the system
- *Purchase Invoice* – value of attribute will be purchase invoice selected from the list of purchase invoices defined in the system
- *Purchase Quote* – value of attribute will be purchase quote selected from the list of purchase invokes defined in the system
- *Fixed Asset* – value of attribute will be fixed asset selected from the list of fixed assets defined in the

system

Hint
The possibility of defining attribute values is available for
attributes of *List* or *Directory* type only (after materializing
a directory).

- **Format** – field active only if one of the following
  values is selected in *Type* field:
    - *Number* – available formats: integer, decimal
      number with two decimal places, decimal number
      with four decimal places
    - *List* – available formats: text, integer, decimal
      number with two decimal places, decimal number
      with four decimal places, SQL query (values of the
      list will result from an executed SQL query). Upon
      selecting the last format, the field *SQL Query*
      becomes active and then an appropriate query text
      can be entered.

In order to materialize data for *SQL Query,* it is necessary to
select [**Execute Query**] button from the main menu and then
[**Materialize**] button from *Directories* For not materialized
attribute of *List* type with *SQL Query* format it is not
possible to check parameter *Multi-company*

Note
Attribute type and format can be changes only until the first
value is assigned to it or until it is attached to an object.
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- **Default Value** –value which is by default assigned to an
  attribute after it is assigned to an object. The field
  will be greyed-out if parameter *Multi-company* is
  selected. For *Purchase Invoice* and *Sales Quote* types, an
  additional button [**Select**] appears, which opens the list
  of documents of one of those types defined in the
  system.

- **Directory** – allows for assigning a value from selected generic directory to an attribute. =

On the attribute form, it is also necessary to determine attribute parameters:

- **Active** – parameter checked by default. If unchecked, selected attribute cannot be used by the objects in the system
- **Analytical** – if checked, a given attribute will be transferred to BI data warehouse and then used in the controlling analyses. The parameter is not available for the type *Binary Data*
- **Closed list** – if checked, it means that it is no longer possible to add new values to an attribute
- **Periodic** – if checked, it is possible to define attribute values which will be valid within specified periods

Note
After an attribute is defined as periodic, an additional parameter *Separate periods* is displayed. That parameter is by default selected, but its setting can be changed any time. If selected, then when specifying validity periods of particular attribute values, the system verifies whether the periods being added do not coincide.

- **Polyvalent** – parameter available for attributes of *Text, Dictionary* or *List* type, if checked, it becomes possible to add more than one value to an attribute
- **Response to question** – if checked, an attribute can be assigned to an object *Questionnaire*. The parameter is available for the following types: *Text, Number, Logic Value, List* or *Date*
- **Multi-company** – if checked, different attribute values can be assigned for centers of *Company* type
- **Grouping** – if checked, it is possible to specify

attributes which will be displayed in eShop for grouped items – base products. The parameter is not available for the following types: *Number, Date* and *Binary Data.*

With the use of selection buttons available under the *Parameters* section, it is possible to decide whether other modules and applications cooperating with Comarch ERP Standard should have possibility of modifying attributes or displaying them only.

In field *Description,* additional notes regarding defined attribute can be provided.

Defining attribute value

To add a new attribute value, first mark an attribute on the list of attributes and then click on the button [**Add**] available in section *Attribute Values* on the right in the *Value* button group.

Attribute value form

An attribute value must be typed in a selected language in the column *Transaction Values*. Here it is possible to add subsequent translations of the attribute value in various languages.

Assigning attribute to an object

To assign a given attribute to an object, it is necessary to mark it from the level of *Configuration → (General) → Attributes,* in the tab *Objects,* in the section *Attributes To Be Added* and select [**Associate**] button from the list *Object Relations* in the main menu. Such attribute will be moved to the section *Added attributes* which means that it is assigned to the object.

To remove an association between an attribute an and an object, it is necessary to select an appropriate attribute in *Added attributes* section and click on [**Assign**] button. The attribute will be moved back to the section *Added Attributes.*

In the menu, there are standard buttons for adding/deleting/saving a given object from the list as well as buttons for refreshing and closing the list.

Note
Changes in the tab *Objects* are saved separately for each object from the list. It means that if a user makes changes for one object and does not save them then, when passing to another object from the list, the system will ask whether the user wants to save the changes.
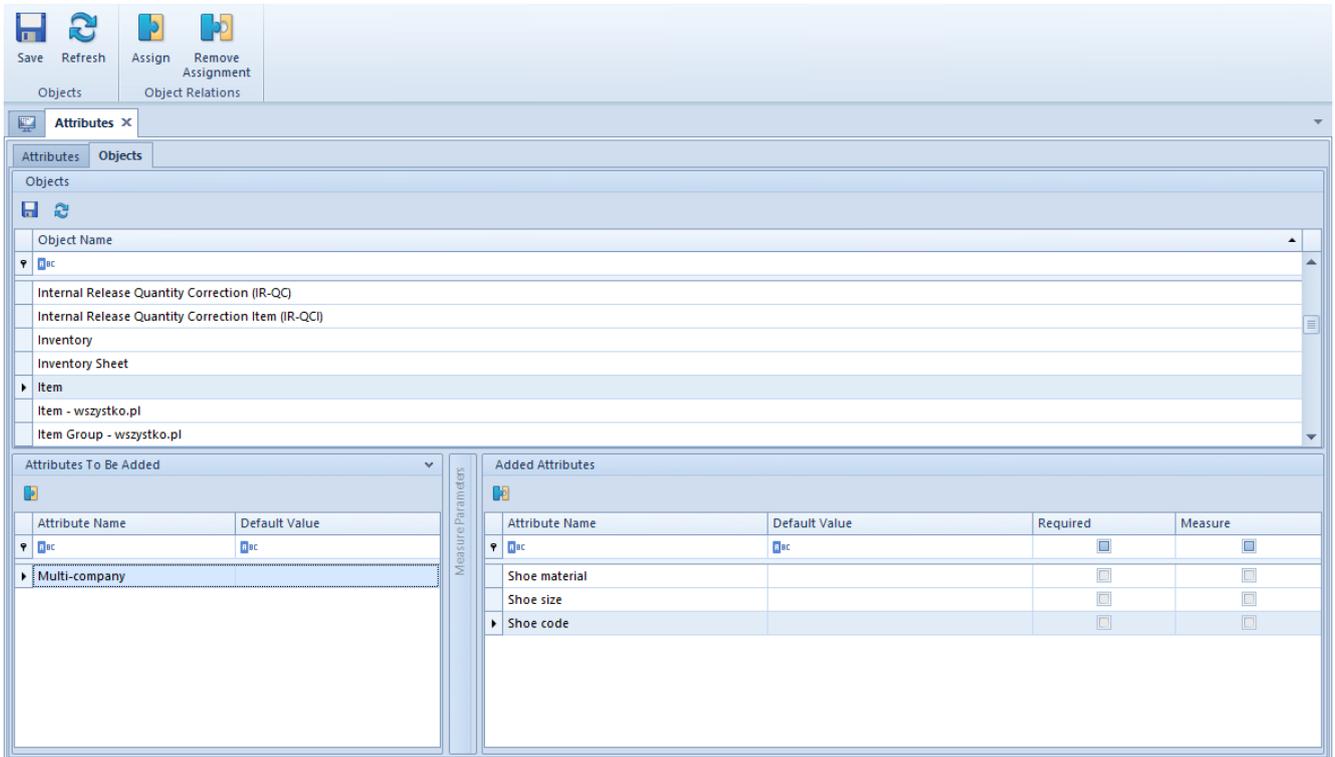
Window for assigning attributes to objects

For the object *Item,* an additional parameter *Copyable* is available in the section *Added Attributes.* If the parameter is checked for a given attribute assigned to the object *Item,* when copying an item, the attribute derived from the source item along with its value (values) is copied.
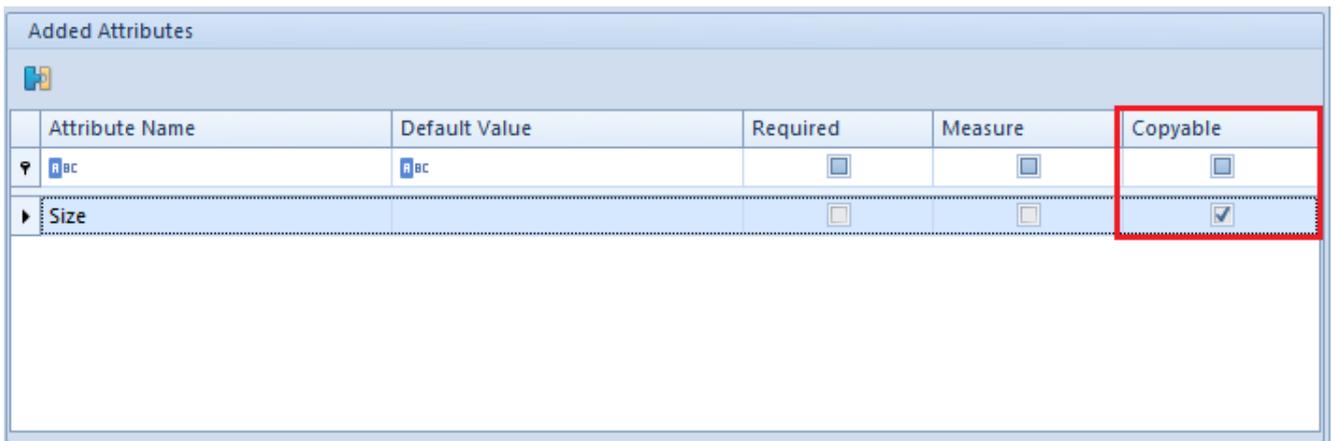
Parameter Copyable in section Added Attributes

Assinging attribute value to an object

After an attribute is <<assigned to an object>>, it is possible to specify a value of that attribute for object instance. It means that if attribute, for example, *Color* is attached to object *Item*, then it is possible to specify a different value (color) of that attribute for each item.

To do so, on the object instance form, for example, item form, go to tab Attributes and click on the button [**Add**] in the *Attributes* button group. A list of attributes assigned to that object will open. Select attributes which must be assigned to that object instance and specify their values.

Depending on the type of the attached attribute, its values can be specified by:

- typing the values manually (*Text, List, Customer/Vendor, Employee, Item, Purchase Invoice, Purchase Quote)*
- selecting them from a drop-down list (*List, Directory*)
- selecting a parameter (*Logic Value*)
- selecting from a built-in calendar (*Date*)
- selecting a number with the help of arrows (*Number*)

Note
If an item was assigned with an attribute that has the parameter Edition in the section e-Shop selected, once the attribute definition is saved, the following message will be displayed: *"Attributes set as editable in e-Shop have been defined for these items. Would you like to assign the definition of those attributes to the Sales Order Item?"*. Selecting the option [**Yes**] will automatically assign a given attribute to the *Sales Order Item (SO)* object.

Multi-company attributes

In the case of multi-company attributes, presentation of attribute value, that is assigned to an object, depends on the level of company structure from the level of which the object is being edited.

In the parent company, on an object, by a multi-company attribute, there is an active option of expanding the nested list. Value presented in the column Value is assigned to parent company. Values defined for child companies are listed upon clicking on the button [+] located next to attribute name.
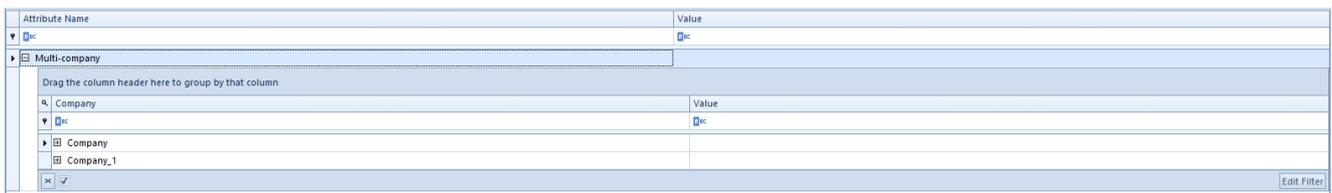
Multi-company attribute on an object from the level of the main company

In the case of multi-company and polyvalent attributes, a drop-down list of attribute values includes all the values defined for each company.

Multi-company polyvalent attribute on an object from the level of the main company

When detaching an attribute from an object which has values specified in other companies, an appropriate message will be displayed. If deletion is attribute is confirmed, it will be

removed from object in the parent company and in all the child companies.

From the level of other centers of company structure, it is not possible to expand the list of attribute values of other companies. Presented attribute value is assigned to a company to which a user is logged in. In the case of multi-company and polyvalent attributes, those attribute values will be displayed, which are defined for a center to which a user is logged in.

If an attribute has a value which is attached also to another center of Company type, then such attribute cannot be deleted from object.

Multi-company attribute on an object from the level of a center

Periodic attributes

In the case of periodic attributes that are assigned to an object, it is possible to add values and to specify their validity periods. These values can be defined on the form opened upon clicking on the suspension points button […] in the column *Value.*

Value of a periodic attribute on an object

[hint] For periodic attributes it is not required to maintain continuity between defined periods. [/hint]