

EnumArray Method Call

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An EnumArray Method Call is a Complex Method Call that returns an EnumArray.

- See [Methods](#) for **explanations** of the basics and for Code **examples** and for the **declaration** of Method Calls.
See [How to use Method Calls](#) for general information on using Method Calls.
- Go to the complete list of all [Complex Method Calls](#)

Code Example

The example exists of an Operation and a Form. In the operation the Entity Collection(s) and Dataview(s) are defined. The definitions of Lists and Method Call(s) for composing the data, based on input from the user, are also defined in the Forms.

Code example Operation

```
protected override IForm CreateStartupForm() { return new EnumA  
rrayMethodCallDemoFrm(this); } public IEntityCollection<EnumArrayM  
ethodCallDemoEntity> EnumArray { get { return Property(() => ne
```

```

w VolatileTable("enum array").Select<EnumArrayMethodCallDemoEntity>().All()); } } public IDataView<EnumArrayMethodCallDemoEntity> EnumArrayView{ get { return Property(() => EnumArray.ToView()); } } public IEntityCollection<EnumEntity<Weeks>> Weeks{ return Property(() => new EnumTable<Weeks>("week", "weeks", GrammaticalGender.Masculine).Select<EnumEntity<Weeks>, Weeks>().All()); }

```

Explanation Code example Operation

1. **Lines 1-4:** Definition of the Form (see code of the Form below).
2. **Lines 6-9:** Definition of a Volatile Table. We fill this in the Form (below).
3. **Lines 11-14:** Definition of the View, which is used to display the data in the Form.
4. **Lines 8 and 11:** The necessary EnumArrayMethodCallDemoEntity is defined elsewhere. Type 'Volatile Table' in the Search box to read more about the working of the Volatile Table.
5. This EnumArrayMethodCallDemoEntity is also used in the Form below, on line 14.
6. **Lines 16-21:** We also need an EntityCollection, based on EnumEntity<Weekss> for this Code example.

Note: In this example, a Volatile Table is used. It is also possible to make a EnumArray based on a Database Table.

Code example Form

```

public EnumArrayMethodCallDemoFrm(EnumArrayMethodCallDemoOp operation) : base(operation) { } protected override UIElement CreateGui() { return new VBox { new HBox { new GroupBox("example", 2, alignV: AlignV.Top) { new DataGrid<EnumArrayMethodCallDemoEntity>(Operation.EnumArrayView, showColumnHeaders: false) { e => e.Value } }, new H

```

```

Box(alignH:AlignH.Fill)          {          new Button(GetEnumArray
y()),          EmptySpace.FillH,          new Button(Close())
    }    };}private EnumArray<Weeks> ComposeEnumArray(){  retu
rn Method(() =>    {          return new Body          {          new
Return(Operation.Weeks.Select(f => f.EnumValue).ToEnumArray())
    };    });}private IMethodCall GetEnumArray(){  return Meth
od(() =>    {          var newListItem = Operation.EnumArray.CreateI
temReference();          var array = new EnumArray<Weeks>();
return new Body          {          Operation.EnumArray.DeleteAll(
),          array.Assign(ComposeEnumArray()),          array.F
oreach(arrayItem => new Body          {          newListIt
em.Assign(Operation.EnumArray.New()),          newListItem.
Omschrijving.Assign(listItem)          })          };    })  .SetW
orkDescription("get enum array")  .SetImage(WikiImages.Director
y)  .Call();}

```

Warning:

All Method Calls and Complex Method Calls **need** a new Return(). They are like C# functions that need a return type.

The exception is an IMethodCall. In C# this is like a void method.

Explanation Code example Form

- **Lines 6-28:** The definition of the form.
- **Line 14:** The View, based on the Entity (see explanation 3 and 4 of the Operation), are passed to a DataGridView.
- **Lines 30-39:** This is a private property of the type EnumArray. In it, the list is composed and returned (line 36). This EnumArray was defined in the Operation as a Volatile Table.
- **Line 36:** Building up this EnumArray is done with the function .ToEnumArray that collects the records collected with the Select.
- **Lines 41-62:** This MethodCall, named GetEnumArray(), starts a new

instance of EnumArray on **line 45**.

- **Line 49**: any previous data is deleted.
- **Line 50-55**: The composed EnumArray is assigned to an array. By looping through this array (line 50) the items are assigned (line 53-54).

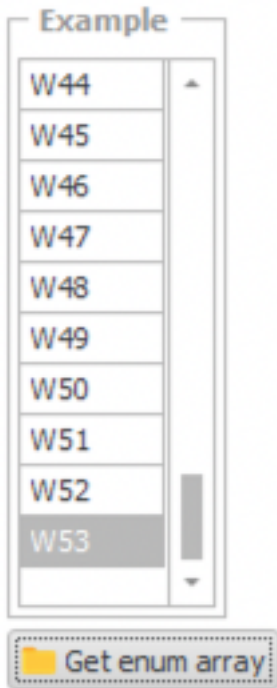
Example of the result

A form like the one defined above, could look like this.

When starting the application:



After clicking the button:



Online URL:

<https://wiki-ai-framework.abstract-it.nl/article/enumarray-method-call-441.html>

```
SyntaxHighlighter.config.stripBrs=true; SyntaxHighlighter.all();
```