



DATA CUSTOMIZER

Table of contents

Introduction.....	3
How does it work?	3
Which pages are concerned?	7
How to extends the feature to custom pages?	7
Code for the two pages extensions.....	9

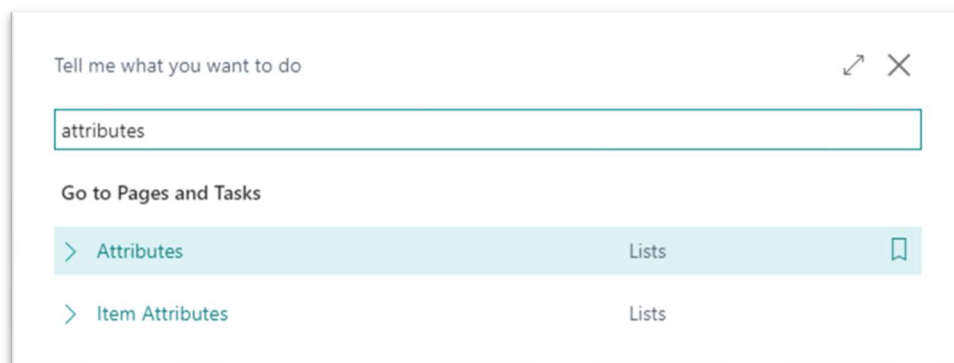
Introduction

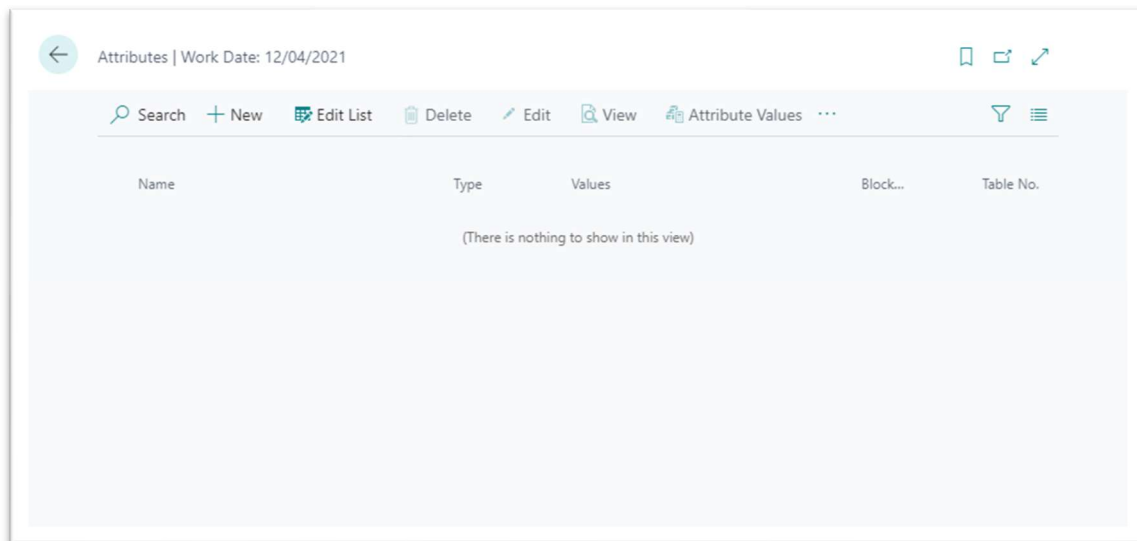
This extension is developed for Dynamics 365 Business Central to extend the attributes feature to other pages, customs or not. The goal of the extension is to give users the abilities to easily complete records with some relevant custom information. Users are free to choose the name and the type of attributes. This feature already exists for items but with now it is extended to all master data of Business Central and you can easily add this to your custom pages.

How does it work?

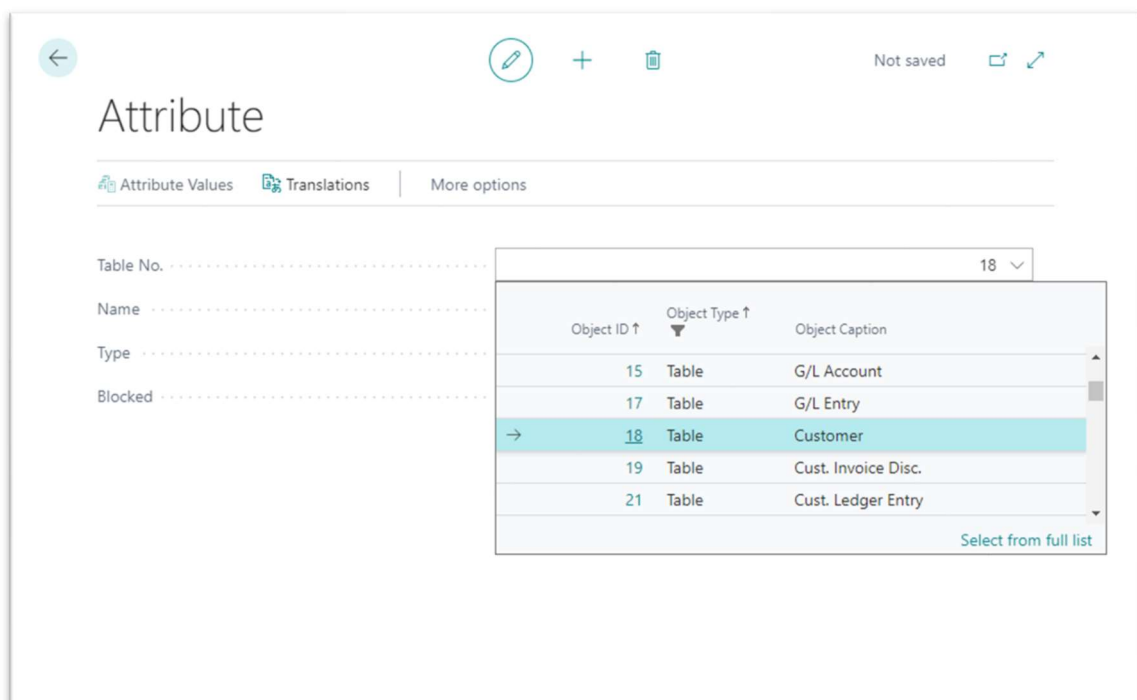
The extension is fully automatic and after installing it, you can add your own attributes on the pages you want. If you want to use only the basic pages that are already modified, you do not have any work to do. But if you want to extend the feature to your custom pages or to pages not modified yet, please refer to the last heading of this guide.

Once the extension is installed, please type “attribute” in the Business Central search bar and select “Attribute” to reach the attribute management page.





From here, you will be able to add your custom attributes. To create a new attribute, please click on “New” and fill in the fields correctly. First, choose the concerned table, for the example I choose the customer table (no. 18).



Next, choose a name and a type for your attribute. If you choose the option type, you will need to fill in the different values. Do not check “Blocked” because it will turn off the possibility to use the attribute.

Attribute | Work Date: 12/04/2021

Height

Attribute Values Translations More options

Table No. 18 Unit of Measure CM

Name Height

Type Decimal

Blocked

Once the attribute is created, please reach the concern page and you will be able to add this new attribute to the entity (in my case customers). The action button is always placed in the menu "Related". You also have a button for filtering on an attribute and a button to clear any attribute filter.

CRONUS FR | Finance | Cash Management | Sales | Purchasing | Setup & Extensions

Customers: All | Search | New | Delete | Process | Report | New Document | Customer | Navigate | Prices & Discounts | Open in Excel | Actions | Related

No. 1	Name	Responsibility Center	Location Code	Phone No.	Contact	Balance (LCY)
10000	Adatum Corporation				Philippe Quenneville	9 107.50
20000	Trey Research				Lorie Leblanc	12 736.10
30000	School of Fine Art				Meagan Bond	54 084.40
40000	Alpine Ski House				Ian Deberry	9 224.30
50000	Relecloud				Marcel Lacombe	8 378.00

Related menu items:

- Customer
- History
- Sales
- Documents
- Attributes
- Filter by Attributes
- Clear Attributes Filter
- Comments
- Dimensions
- Bank Accounts
- Direct Debit Mandates
- Ship-to Addresses
- Contact
- Cross References
- Approvals
- Sent Emails

So please click on the "Attributes" button and create a new line with the attribute you have created just before.

Edit - Attribute Values

Attribute Values | Manage

Attribute ↑	Value	Unit of Measure
→ Height	175	CM

OK Cancel

Now you can see the new attribute for this customer in the factbox on the right of the screen for the list view and in a new heading for the card view.

CRONUS FR | Finance | Cash Management | Sales | Purchasing | Setup & Extensions

Customers: All | Search | + New | Delete | Process | Report | New Document | Customer | Navigate | Prices & Discounts | Open in Excel | Actions

No. ↑	Name	Responsibility Center	Location Code	Phone No.	Contact	Balance (LCY)	Balance Due (LCY)
10000	Adatum Corporation				Philippe Quenneville	9 107.50	9 107.50
20000	Trey Research				Lorie Leblanc	12 736.10	11 767.60
30000	School of Fine Art				Meagan Bond	54 084.40	52 169.00
40000	Alpine Ski House				Ian Deberry	9 224.30	9 224.30
50000	Relecloud				Marcel Lacombe	8 378.00	5 456.20

Details | Attachments (0)

Attributes

Attribute	Value
Height	175 CM

Customer Card | Work Date: 12/04/2021

10000 · Adatum Corporation

New Document | Approve | Request Approval | Prices & Discounts | Navigate | Customer | More options

General Show more

No.	10000	Credit Limit (LCY)	0.00
Name	Adatum Corporation	Blocked	
Balance (LCY)	9 107.50	Total Sales	69 001.03
Balance Due (LCY)	9 107.50	Costs (LCY)	33 887.95

Customer Attributes

Attribute Values

Attribute ↑	Value	Unit of Measure
→ Height	175	CM

Which pages are concerned?

With this extension, we have added the attribute feature to a lot of pages from the base application. There is an exhaustive list of the concerned ones:

- Salesperson/Purchaser
- Location
- G/L Account
- Customer
- Vendor
- Resource
- Job
- Bank Account
- Contact
- Team
- Employee
- Serial No. Information
- Lot No. Information

Attributes appears in a factbox on the right of the screen for list pages and in an independent heading for card pages.

How to extends the feature to custom pages?

To extends the attribute feature to new basic or custom pages, you need to create an AL extension for Business Central and to create two pages extensions for both list and card. I will show you an example with customers, but it is the same thing for all the tables you want. So, you must create two new pages extensions named like this:

```
Pag-Ext70256127.SICCustomerListExt.al  
Pag-Ext70256128.SICCustomerCardExt.al
```

You have some little modifications to do in the code to activate the feature. I show you the part of code to modified and you will be able to get the full code at the end of this document.

- Customer List Ext

```
pageextension 70256127 "SCGAM Customer List Ext" extends "Customer List"
```

Here you must change the page extension number compared to the range allowed in your file "app.json". You must change the name of the page extended (here "Customer List") with the name of the list page you want to change and obviously change the name of the page extension by adding "Ext" for example.

```
addfirst("&Customer")
```

Here you just must change "&Customer" by the name of the group for your page (with Visual Studio Code you can find it by pressing Ctrl + Space and search for the name of your entity).

- Customer Card Ext

```
pageextension 70256128 "SCGAM Customer Card Ext" extends "Customer Card"
```

Same as the page list extension, change the number, the page name and the name of the page extended.

```
group("SCGAM Customer Attributes")
```

And finally, here, you must change "Customer Attributes" by the name of your entity.

And that is it for the modification of the code. It is relatively short and fast to add the two new pages extensions.

Code sample for the two pages extensions

- Page extension list

```
pageextension 70256127 "SCGAM Customer List Ext" extends "Customer List"
{
    layout
    {
        addfirst(factboxes)
        {
            part(SCGAMAttributesFactBox; "SCGAM Attributes Factbox")
            {
                ApplicationArea = Basic, Suite;
                Visible = AttributeForThisRecord;
            }
        }
    }

    actions
    {
        addfirst("&Customer")
        {
            action("SCGAM Attribute")
            {
                AccessByPermission = TableData "SCGAM Attribute" = R;
                ApplicationArea = Basic, Suite;
                Caption = 'Attributes';
                Image = Category;
                ToolTip = 'View or edit the records attributes, such as color,
size, or other characteristics that help to describe the record.';
                Visible = AttributeForThisRecord;
                trigger OnAction()
                begin
                    SCGAMAttributeManagement.RunAttributesEditorPage(Rec.RecordId);

                    CurrPage.SaveRecord();
                    CurrPage.SCGAMAttributesFactbox.PAGE.LoadAttributesData(Rec.RecordId);
                end;
            }

            action("SCGAM FilterByAttributes")
            {
                AccessByPermission = TableData "SCGAM Attribute" = R;
```

```

        ApplicationArea = Basic, Suite;
        Caption = 'Filter by Attributes';
        Image = EditFilter;
        ToolTip = 'Find items that match specific attributes. To make
sure you include recent changes made by other users, clear the filter and then
reset it.';
        Visible = AttributeForThisRecord;

        trigger OnAction()
        begin
            Rec.SetFilter("No.",
SCGAMAttributeManagement.RunAttributesFilterPage(Rec.RecordId,
TempSCGAMFilterAttributesBuffer));
        end;
    }
    action("SCGAM ClearAttributes")
    {
        AccessByPermission = TableData "Item Attribute" = R;
        ApplicationArea = Basic, Suite;
        Caption = 'Clear Attributes Filter';
        Image = RemoveFilterLines;
        ToolTip = 'Remove the filter for specific attributes.';
        Visible = AttributeForThisRecord;

        trigger OnAction()
        begin
            Rec.SetFilter("No.",
SCGAMAttributeManagement.ClearAttributesFilterPage(TempSCGAMFilterAttributesBu
ffer));
        end;
    }
}

trigger OnAfterGetCurrRecord()
var
begin
    CurrPage.SCGAMAttributesFactBox.PAGE.LoadAttributesData(Rec.RecordId);
end;

trigger OnOpenPage()
begin
    AttributeForThisRecord :=
SCGAMAttributeManagement.AttributeForThisRecord(Rec.RecordId.TableNo);
end;

```

```

var
    TempSCGAMFilterAttributesBuffer: Record "SCGAM Filter Attributes
Buffer" temporary;
    SCGAMAttributeManagement: Codeunit "SCGAM Attribute Management";
    AttributeForThisRecord: Boolean;
}

```

- Page extension card

```

pageextension 70256128 "SCGAM Customer Card Ext" extends "Customer Card"
{
    layout
    {
        addafter(General)
        {
            group("SCGAM Customer Attributes")

            {
                Visible = AttributeForThisRecord;
                Caption = 'Customer Attributes';
                part(SCGAMAttributeValueList; "SCGAM Attribute Value
List")
                {
                    ApplicationArea = Basic, Suite;
                    Visible = AttributeForThisRecord;
                    SubPageLink = "Inherited-From Key Value" =
field("No.");
                }
            }
        }

        trigger OnOpenPage()
        begin
            AttributeForThisRecord :=
SCGAMAttributeManagement.AttributeForThisRecord(Rec.RecordId.TableNo);
            CurrPage.SCAMAttributeValueList.PAGE.LoadAttributes(Rec.RecordI
d(), false);
            PreviousRecordID := Rec.RecordId;
        end;

        trigger OnAfterGetRecord()
        begin

```

```
        if PreviousRecordID <> Rec.RecordId then
            CurrPage.SCGAMAttributeValueList.PAGE.LoadAttributes(Rec.RecordId(), true);
        end;

    var
        SCGAMAttributeManagement: Codeunit "SCGAM Attribute Management";
        AttributeForThisRecord: Boolean;
        PreviousRecordID: RecordId;
    }
```