

This is an extremely short text for creating a Microsoft Dynamics Navision Report. The goal of the report we will create is to list the details of the table of accounts in Navision (articles, postings).

Only the most important aspects of this report will be mentioned in this text.

Contents of this paper:

- Print request form filters in the header of the report
- Use of temporary tables (sorting, modify, insert,...)
- Use filter of one table for other tables (request form)
- Loops, Boolean,...
- Newpage
- ...

Notes

- In this paper a temporary table called „Item Statistic Buffer“ is used.
-

At first here ist the list of C/AL Globals which will be needed for the report.

Name	Data Type	Subtype	Length
ItemStatBuffer	Record	Item Statistic Buffer	
RecItem	Record	Item	
CaptionFilter	Text		1024
ReqMaxRec	Integer		
i	Integer		
sachkonto	Text		30
x	Integer		
int	Integer		
firstrun	Boolean		
arexist	Boolean		
bufdec	Decimal		
datefilter	Text		30
beleg	Text		30
saldo	Decimal		
bufmeng	Decimal		
sachk	Text		30
add	Text		50
firstloop	Boolean		
looprun	Boolean		
skto	Text		30
saldoart	Decimal		
saldosach	Decimal		
sachk2	Text		30
saldosum	Decimal		
filt1	Text		30
filt2	Text		30
filt3	Text		30
filt4	Text		30
sachklist	Boolean		

Properties of „ItemStatBuffer“ (Temporary must be set to „Yes“):

Property	Value
ID	1000000000
Dimensions	<Undefined>
Temporary	Yes

It is very important that the value „Temporary“ in the properties of „ItemStatBuffer“ is set to „Yes“!

Report Structure

DataItem	Name
G/L Account	<G/L Account>
G/L Entry	<G/L EntrySP>
G/L Entry	<G/L Entry>
Value Entry	<Value Entry>
Integer	PageLoop
Integer	ItemLoop

- Properties: G/L Account

Property	Value
DataItemIndent	
DataItemTable	G/L Account
DataItemTableView	SORTING(No.) ORDER(Ascending)
DataItemLinkReference	<Undefined>
DataItemLink	<Undefined>
NewPagePerGroup	<No>
NewPagePerRecord	<No>
ReqFilterHeading	<>
ReqFilterHeadingML	<>
ReqFilterFields	No.,Global Dimension 1 Code
TotalFields	<Undefined>
GroupTotalFields	No.
CalcFields	<Undefined>
MaxIteration	
DataItemVarName	<G/L Account>
PrintOnlyIfDetail	yes

- Properties: G/L EntrySP

Property	Value
DataItemIndent	
DataItemTable	G/L Entry
DataItemTableView	SORTING(Document No.) ORDER(Ascending) WHERE(Value Entry No. =FILTER(0))
DataItemLinkReference	<G/L Account>
DataItemLink	G/L Account No. =FIELD(No.)
NewPagePerGroup	<No>
NewPagePerRecord	<No>
ReqFilterHeading	Sachkonten (ohne Artikel)
ReqFilterHeadingML	DEA=Sachkonten (ohne Artikel)
ReqFilterFields	Posting Date
TotalFields	<Undefined>
GroupTotalFields	G/L Account No.
CalcFields	<Undefined>
MaxIteration	
DataItemVarName	<G/L EntrySP>
PrintOnlyIfDetail	<No>

Please take a very close look to ALL „DataItemLinks“!

<G/L EntrySP> is used for all postings without articles.

<G/L Entry is used> is used for all postings with articles.

Value Entry is used to calculate the sum for the articles,...

Sorting is based on „Account No.“.

„PrintOnlyIfDetail“ must be set to „Yes“.

Required „ReqFilterFields“ are „No.“ And „Gloabl Dimension 1 Code“.

„GroupTotalFields“ must be set to „No.“ (we want to print details for every Account No.)

Sorting by „Document No.“. Only postings without articles are recognized (Value Entry No. Filter = 0)

ReqFilterFields: Posting Date

GroupTotalFields: G/L Account No.

- Properties: G/L Entry

Property	Value
DataItemIndent	
DataItemTable	G/L Entry
DataItemTableView	SORTING(Document No.) ORDER(Ascending) WHERE(Value Entry No. =FILTER(<>0))
DataItemLinkReference	<G/L Account>
DataItemLink	G/L Account No. =FIELD(No.)
NewPagePerGroup	<No>
NewPagePerRecord	<No>
ReqFilterHeading	Sachkonten (Artikel)
ReqFilterHeadingML	DEA=Sachkonten (Artikel)
ReqFilterFields	Posting Date
TotalFields	<Undefined>
GroupTotalFields	Document No.
CalcFields	<Undefined>
MaxIteration	
DataItemVarName	<G/L Entry>
PrintOnlyIfDetail	<No>

- Properties: Value Entry

Property	Value
DataItemIndent	
DataItemTable	Value Entry
DataItemTableView	<Undefined>
DataItemLinkReference	<G/L Entry>
DataItemLink	Document No. =FIELD(Document No.)
NewPagePerGroup	<No>
NewPagePerRecord	<No>
ReqFilterHeading	<>
ReqFilterHeadingML	<>
ReqFilterFields	Item No.
TotalFields	<Undefined>
GroupTotalFields	Item No.
CalcFields	<Undefined>
MaxIteration	
DataItemVarName	<Value Entry>
PrintOnlyIfDetail	<No>

DataItemTableView:

Only print postings with articles

ReqFilterFields:

Posting Date

GroupTotalFields:

Document No.

Group by Item No.

- Properties: PageLoop

Property	Value
DataItemIndent	
DataItemTable	Integer
DataItemTableView	SORTING(Number) ORDER(Ascending) WHERE(Number=CONST(1))
DataItemLinkReference	<G/L Account>
DataItemLink	<Undefined>
NewPagePerGroup	<No>
NewPagePerRecord	<No>
ReqFilterHeading	<>
ReqFilterHeadingML	<>
ReqFilterFields	<Undefined>
TotalFields	<Undefined>
GroupTotalFields	<Undefined>
CalcFields	<Undefined>
MaxIteration	
DataItemVarName	PageLoop
PrintOnlyIfDetail	<No>

- Properties: ItemLoop

Property	Value
DataItemIndent	
DataItemTable	Integer
DataItemTableView	SORTING(Number) ORDER(Ascending)
DataItemLinkReference	<PageLoop>
DataItemLink	<Undefined>
NewPagePerGroup	<No>
NewPagePerRecord	<No>
ReqFilterHeading	<>
ReqFilterHeadingML	<>
ReqFilterFields	<Undefined>
TotalFields	<Undefined>
GroupTotalFields	<Undefined>
CalcFields	<Undefined>
MaxIteration	
DataItemVarName	ItemLoop
PrintOnlyIfDetail	<No>

Nothing special here.

PageLoop and ItemLoop are used for the temporary table.

C/AL Code of Tables

(tables with no code are not listed here...)

- C/AL-Code - Report:

```
Documentation()

Report - OnInitReport()
CLEARALL;
firststrun := TRUE;
int := 1;
firstloop := TRUE;
saldo := 0;

Report - OnPreReport()
ItemStatBuffer.RESET();
ItemStatBuffer.INIT();

datefilter := "G/L Entry".GETFILTER("Posting Date");

"Value Entry".SETFILTER("Posting Date", datefilter);

filt1 := "G/L Account".GETFILTER("No.");
filt2 := "G/L Account".GETFILTER("Global Dimension 1 Code");
"Value Entry".SETFILTER("Global Dimension 1 Code", filt2)

Report - OnPostReport()

Report - OnCreateHyperlink(UAR URL : Text[1024])

Report - OnHyperlink(URL : Text[1024])
```

- C/AL-Code – G/L Account:

```
Documentation()

G/L Account - OnPreDataItem()
CLEARALL;
ItemStatBuffer.INIT;
ItemStatBuffer.DELETEALL;

firststrun := TRUE;
int := 1;

firstloop := TRUE;
saldo := 0;
saldoart := 0;
saldosach := 0;
saldosum := 0;

G/L Account - OnAfterGetRecord()

G/L Account - OnPostDataItem()
```

CLEARALL; clears all variables,...

Reset and initialize the temporary table with „ItemStatBuffer.RESET();“ and „ItemStatBuffer.INIT()“;

Copy the filtered date from „G/L Entry“ Request form to the variable „datefilter“

Use datefilter to set the filter for „Posting Date“ (Table „Value Entry“).

CLEARALL clears all internal variables.

ItemStatBuffer.INIT and DELETALL initializes and deletes all entries of the temporary table.

- C/AL-Code – G/L EntrySP:

```

Documentation()
-----
<G/L EntrySP> - OnPreDataItem()
sachklist := FALSE;

<G/L EntrySP> - OnAfterGetRecord()

saldo := saldo + Amount;
saldosach := saldosach + Amount;

<G/L EntrySP> - OnPostDataItem()

```

Calculate saldo and saldosach (add value of „G/L EntrySP“.“Amount“).

- C/AL-Code – G/L Entry:

```

Documentation()
-----
G/L Entry - OnPreDataItem()
sachkonto := "G/L Entry"."G/L Account No.";

G/L Entry - OnAfterGetRecord()

sachkonto := "G/L Entry"."G/L Account No.";
saldo := saldo + "G/L Entry".Amount;
saldoart := saldoart + "G/L Entry".Amount;

IF beleg = "G/L Entry"."Document No." THEN BEGIN
    CurrReport.SKIP;
END;

beleg := "G/L Entry"."Document No.";
skto := "G/L Entry"."G/L Account No.";

bufmeng := 0;
bufdec := 0;

arexist := FALSE;

G/L Entry - OnPostDataItem()

```

Set „sachkonto“ to „G/L Account No.“.

Calculate saldo and saldoart („G/L EntrySP“.“Amount“).

If this „Document No.“ has already been calculated then skip! (CurrReport.SKIP).

Set „beleg“ to „Document No.“.

- C/AL-Code – ItemLoop:

```

Documentation()
ItemLoop - OnPreDataItem()
ItemStatBuffer.RESET();
ItemStatBuffer.ASCENDING(FALSE);
ItemStatBuffer.SETCURRENTKEY("Decimal 1");

IF (ItemStatBuffer.COUNT < ReqMaxRec) THEN
    ReqMaxRec := ItemStatBuffer.COUNT;

SETRANGE(Number, 1, ReqMaxRec);

ItemLoop - OnAfterGetRecord()
IF (Number = 1) THEN BEGIN
    ItemStatBuffer.FIND('-');
END ELSE
    ItemStatBuffer.NEXT();

RecItem.GET(ItemStatBuffer."Item No.");

ItemLoop - OnPostDataItem()

```

RESET resets the temporary table.

ASCENDING(True) sets sorting to ascending.

SETCURRENTKEY sets the Key of the table to „Item No.“

Set ReqMaxRec to the number of entries in the temporary table.

SETRANGE sets the entries of the table which will be printed

Use FIND for first entry and NEXT() to get all lines of the table.

Report Sections

There will be no further explanation for the design of the report.

G/L Account, Header (1)				
Sachposten			=<FORMAT(TODAY,0,4)>	
=<COMPANYNAME>			Co...	=...
			=<USERID>	
G/L Account, Header (2)				
Sachkonten:	=<filt1>	Kst-Filter:	=<filt2>	
> <G/L EntrySP>, Header (1)				
=<"G/L Accou...>		Datumsfilter:	=<filt4>	
Sachkontenbuchungen				
Beleg	Datum	Beschreibung	Saldo	
> <G/L EntrySP>, Body (2)				
=<"Document No.">	=<"Posting Dat...>	=<"Description">	=<"Amount">	
> <G/L EntrySP>, Footer (3)				
Saldo Sachkontenbuchungen:			=<saldosach>	
> G/L Entry, Header (1)				
> G/L Entry, Header (2)				
> > Value Entry, Body (1)				
> > ItemLoop, Header (1)				
=<sachkonto>		Datumsfilter:	=<filt3>	
Artikel				
Nummer	Artikelnr.	Menge	Saldo	
> > ItemLoop, Body (2)				
=<Nu...>	=<ItemStatBuffer."Ite...>	=<ItemStatBuffer."D...>	=<Item StatBuffer....>	
> > ItemLoop, Footer (3)				
Saldo gesamt:			=<saldosum>	

C/AL-Code - Report Sections

(sections with no code are not listed here...)

- G/L Account, Header (1)

```
Documentation()
-----
G/L Account, Header (1) - OnPreSection()
filt1 := "G/L Account".GETFILTER("No.");
filt2 := "G/L Account".GETFILTER("Global Dimension 1 Code");

G/L Account, Header (1) - OnPostSection()
```

Copy filters to „filt1“and „filt2“

- G/L EntrySP, Header(1)

```
Documentation()
-----
<G/L EntrySP>, Header (1) - OnPreSection()
filt3 := "G/L Entry".GETFILTER("Posting Date");
filt4 := "<G/L EntrySP>".GETFILTER("Posting Date");

IF firstrun = FALSE THEN BEGIN
    CurrReport.NEWPAGE;
END;

sachklist := TRUE;

<G/L EntrySP>, Header (1) - OnPostSection()
```

Copy filterst o „filt3“ and „filt4“

If „firstrun“ is set to false then
begin new page

Set boolean „sachklist“ to TRUE

- G/L Entry, Header (2)

```
Documentation()
-----
G/L Entry, Header (2) - OnPreSection()
sachkonto := "G/L Entry"."G/L Account No.";

G/L Entry, Header (2) - OnPostSection()
```

- Value Entry, Body (1)

```
Documentation()
-----
Value Entry, Body (1) - OnPreSection()

Value Entry, Body (1) - OnPostSection()
// init
ItemStatBuffer.INIT;

IF ItemStatBuffer.GET("Value Entry"."Item No.") = TRUE THEN BEGIN
    bufdec := ItemStatBuffer."Decimal 1" + "Value Entry"."Cost Posted to G/L";
    bufmeng := ItemStatBuffer."Decimal 2" + "Value Entry"."Invoiced Quantity";

    ItemStatBuffer."Decimal 1" := bufdec;
    ItemStatBuffer."Decimal 2" := bufmeng;
    ItemStatBuffer.Description := "G/L Entry"."G/L Account No.";
    ItemStatBuffer.MODIFY;

    arexist := TRUE;
END;

IF arexist = FALSE THEN BEGIN
    int := int + 1;
    ItemStatBuffer."Item No." := "Value Entry"."Item No.";
    ItemStatBuffer."Decimal 1" := "Value Entry"."Cost Posted to G/L";
    ItemStatBuffer."Decimal 2" := "Value Entry"."Invoiced Quantity";
    ItemStatBuffer.Description := "G/L Entry"."G/L Account No.";
    ItemStatBuffer.INSERT(FALSE);
END;
```

Initialize temporary table.

If item already exist in table
(because it was inserted before),
then update the information in
the table. (MODIFY).

Please note that „GET“ has to be
run before MODIFY!

Otherwise, insert new row in
table for the specific item
(INSERT)

- ItemLoop, Header (1)

Documentation()

ItemLoop, Header (1) - OnPreSection()

```
filt3 := "G/L Entry".GETFILTER("Posting Date");  
filt4 := "<G/L EntrySP>".GETFILTER("Posting Date");
```

```
IF sachklist = FALSE THEN BEGIN  
    CurrReport.NEWPAGE;  
END;
```

ItemLoop, Header (1) - OnPostSection()

Print filters to „filt3“ and „filt4“

If boolean „sachklist“ is set to false -> begin new page

For the basics of programming in Dynamics NAV you can have a look at the following book:

„Programming Microsoft Dynamics NAV“
ISBN: 978-1-904811-74-9