

DB Gurus

Access Development

Coding Guidelines

Document History

This section describes the changes of the document by version number.

Version	Date	Initials	Description of change
1.0	Oct 17, 2007	BJ	Initial Draft
1.1	Nov 12, 2007	BJ	Changes to make some points clearer
1.2	Dec 19, 2007	BJ	More changes to clarify other points

The naming conventions used are based on common Microsoft Access naming conventions developed by Stan Leszynski, which can be referenced using the following sites:

- <http://www.mvps.org/access/general/gen0012.htm>
- <http://c85.cemi.rssi.ru/access/Books/A97ExSol/contents.htm>
- See table at the bottom of this document

These naming conventions were used as a reference. Therefore, we do not adhere to all of the proposed conventions, and in some cases, we may use them at all.

NAMING CONVENTIONS

General

- **Never** use spaces in object names
- **Do NOT** use hyphens, or underscores either, this helps to avoid issues when writing code
- **Do NOT** use any special characters; only use letters and numbers
- **Capitalize the first letter of each word; this makes the object name easier to read**
 - Example: cbo**S**elect**A**ccount, rpt**P**roduct**L**ist**M**aster
- When a prefix is used, make it lowercase
 - Example: cboSelectAccount, rptProductList
- Use a standard name for objects which are used together; this keeps them together in the list
 - Example:
 - frmAccount
 - frmAccountInventory
 - frmAccountInventoryDetail
 - frmAccountProduct
- Do NOT use Plurals as frmAccounts will come after frmAccountProduct rather than before it!
- Do not shorten object names unnecessarily eg to save a few letters
 - Example do not name a object "qryRptCmpFlds" Name it "qryReportCompanyFields"
- If abbreviations are going to be used, be consistent for all objects of that type or Module
 - Example: instead of using ProductInventoryExport for each of the objects, PIE can be used to avoid unnecessarily long names: qryPIEDelete, qryPIEItem, qryPIEStoreList
- Object names should not be shared between tables, queries, forms, reports, macros, and modules, which is why prefixes are used; this helps to avoid issues when writing code
- Example: do not have a table named Account and a form named Account

Version Control

- Always update the table : tblFrontEndVersion, it is meant to contain a history of the front-end versions
- If you are working on an existing application that we have just picked up and it does not have tblFrontEndVersion, Copy it in. If you do not have a copy of this table please ask your Team Leader/Project Manager at DB Gurus
- Make sure you fill it and keep to the version format.

- Do not be afraid to use new version numbers, Each time you submit an update it **MUST** be a new version. Use 2 decimal places if you thij there are going to be many updates e.g. 1.56, 1.57 etc
- Make sure you save your work regularly. I recommended naming convention is... The application name, date, and time (**hour only**) is used to facilitate version control and backups
- Example: MyApp Jul 05 2007 1pm.mdb

Temporary Objects

- All temporary objects are prefixed with a lowercase "z"
- Example: zqryTestValidData, zfrmAccountNew
- This places temporary objects at the end of the list, making them easy to find
- Temporary objects are used for testing purposes only
- When a new version is released, it is assumed that all temporary objects will be deleted
- **Deleting temporary objects should have no effect on the functionality of the application**

SQL Tables

- All tables except for User tables do not use a prefix
- When a SQL table is first linked, it has a prefix of "dbo_" that we do not use
- User tables are prefixed with "usr" and are used to store user-specific settings; this allows a user to set a form's options which will be remembered the next time they use the form

Access Tables

- Access tables are prefixed with "tbl"
- Typically, these are front-end working tables which are emptied, in code, before each use; they store temporary data while a process is running
- Some of these tables are permanent and are not emptied
- Example: tblFrontEndVersion contains a history of the front-end versions

Table Field Names

- There are no prefixes associated with field names
- The same conventions listed in General above are followed

Queries

- All queries are prefixed with "qry"
- Different query types do not use different prefixes
- Example: a select query, an update query, and a delete query all use a prefix of "qry"

- Whenever possible, a query is stored within a form or report, not as a separate object
- There are potential speed issues with this approach, but it greatly reduces the number of objects

Forms

- All forms are prefixed with "frm"
- Subforms will typically be named the same as the main form, but with a suffix of Detail
- Example: a main form named frmDeliveryStatus and a subform named frmDeliveryStatusDetail

- Typically, labels use the default name assigned when they are created; when a special label is used, it is prefixed with "lbl" although you may find some using the prefix "lab"
- Text boxes are prefixed with "txt"
- Combo boxes are prefixed with "cbo"
- List boxes are prefixed with "lst"
- Check boxes are prefixed with "chk"
- Command buttons are prefixed with "cmd"
- Option Groups are prefixed with "grp"
- Tab controls are prefixed with "tab"

Reports

- All reports are prefixed with "rpt"
- Typically, objects within a report are not referenced; therefore the object name is set to be the same as the Control Source
- Typically, labels use the default name assigned when they are created

Macros

- This is the only object type with which we did not use prefixes

Modules

- All modules are prefixed with "bas" Except Class modules which are "cls"
- Procedures and functions are grouped together within a module either based on their type, such as general procedures being placed in basProcedures or by the aspect of the application they are involved in, such as basProgressMeter

Variables

- Strings are prefixed with "str"
- Long Integers are prefixed with "lng"
- Integers are prefixed with "int"
- Bytes are prefixed with "byt"
- Databases are prefixed with "dbs"
- QueryDefs are prefixed with "qdf"
- Recordsets are prefixed with "rst"
- Variants are prefixed with "var"
- Module variables are prefixed with "m" then followed by conventions listed above
- Global variables are prefixed with "g" then followed by conventions listed above

DESIGN CONVENTIONS

- If you are adding to or modifying an existing application Make sure you review the style and format used in the application (Even if you think it is ugly!) It is most important to keep the consistency of the application. If it is really bad please check in with your team Leader/Project Manager at DB Gurus for guidance.
- If you are adding forms and reports try and copy an existing form or report, and modify it
- This will allow you to get a clear understanding of:
 - Size, placement, alignment, color, font, font size, etc. of **all** objects
 - Tab control is always set, not left to the order in which the objects were created
- Hidden fields:
 - Fields which have Visible = No also have a red border and sometimes a white background instead of transparent, which allows for quick detection in design view
- Disabled fields have the following properties:
 - Enabled = No, Locked = Yes, and Back Style = Transparent
- Buttons:
 - Close is used when there is no record source and therefore nothing to save
 - OK is used when there is the possibility that the user may modify a record
 - Cancel is used when there is the possibility that the user may modify a record
- Message Boxes:
 - Always provide a title to help the user, although the message and title are often similar
 - If the message box is displaying information, use OK
 - If the message box is providing a choice by making a statement, use OK Cancel
 - If the message box is providing a choice by asking a question, use Yes No
 - Use vbInformation or vbQuestion where appropriate; vbExclamation should be used in emergencies only, to warn of a major error
- Writing Code:
 - Provide comments when necessary
 - Wrap long lines with the appropriate _ & method

- The rule is: A line of code should not be longer than a code window viewed on a resolution of 1024 X 768

- **Use proper indenting and spacing**

- ALL Code MUST be indented from the procedure header and End Sub lines
- There MUST be spacing in the procedure There should ALWAYS be spaces after the procedure header (`Private Sub cmdBack_Click()`) and before the end of the procedure (`End Sub`)

WRONG!

```
-----  
Private Sub cmdBack_Click()  
DoCmd.Close acForm, Me.Name  
End Sub  
-----
```

RIGHT

```
-----  
Private Sub cmdBack_Click()  
  
    DoCmd.Close acForm, Me.Name, acSaveNo  
  
End Sub  
-----
```

- **When creating SQL strings Use UpperCase for all the Operators**

This adds to the readability of long SQL Strings

WRONG!

```
IstSearchingResult.RowSource = "select propertyName from Property order by propertyName"
```

RIGHT

```
IstSearchingResult.RowSource = "SELECT propertyName FROM Property ORDER BY propertyName"
```

TABLE OF PREFIXES

Object	Prefix	Example
Form	frm	frmCustomer
Form (sub form)	frm{formname}Detail	frmCustomerDetail
Module	bas	basBilling
Class Module	cls	clsConditionalFormatting
Query	qry	qappNewProduct
Report	rpt	rptInsurance
Report (sub form)	rpt[ReportName]Detail	rptInsuranceDetail
Table	tbl	tblCustomer
Macro	mcr	mcrUpdateInventory

Database Container Object Prefixes

Archived objects	zz	zzfrmPhoneList
System Objects	zs	zstblObjects
Temporary objects	zt	ztqryTest
Under development	_ _mcrnewEmployee	

Prefixes for Control Objects

Chart	cht	chtSales
Check box	chk	chkReadOnly
Combo box	cbo	cboIndustry
Command button	cmd	cmdCancel
Frame	fra	fraPhoto
Label	lbl	lblHelpMessage
Line	lin	linVertical
Listbox	lst	lstPolicyCode
Option button	opt	optFrench
Option group	grp	grpLanguage
Subform/report	sub	subContact
Textbox	txt	txtLoginName
Toggle button	tgl	tglForm

Prefixes for Access Basic / VBA Variables

Container	con	Dim conTables as Container
Control	ctl	Dim ctlVapour As Control
Currency	cur	Dim curSalary As Currency

Database	db	Dim dbCurrent As Database
Document	doc	Dim docRelationships as Document
Double	dbl	Dim dblPi As Double
Dynaset	dyn	Dim dynTransact As Dynaset
Field	fld	Dim fldLastName as Field
Flag (Y/N,T/F)	f	Dim fAbort As Integer
Form	frm	Dim frmGetUser As Form
Group	grp	Dim grpManagers as Group
Index	idx	Dim idxOrderId as Index
Integer	int	Dim intRetVal As Integer
Long	lng	Dim lngParam As Long
Object	obj	Dim objGraph As Object
Parameter	prm	Dim prmBeginDate as Parameter
Property	prp	Dim prpUserDefined as Property
QueryDef	qdf/qrd	Dim qdfPrice As QueryDef
Recordset	rst/rec	Dim rstPeople as Recordset
Relation	rel	Dim relOrderItems as Relation
Report	rpt	Dim rptYTDSales As Report
Single	sng	Dim sngLoadFactor As Single
Snapshot	snp	Dim snpParts As Snapshot
String	str	Dim strUserName As String
Table	tbl	Dim tblVendor As Table
TableDef	tdf/tbd	Dim tdfBooking as TableDef
Type (user-defined)	typ	Dim typPartRecord As mtPART_RECORD
User	usr	Dim usrJoe as User
Variant	var	Dim varInput As Variant
Workspace	wrk/wsp	Dim wrkPimary as Workspace
Yes/No	bol	Dim bolPaid As Boolean

Access Basic Variable / VBA Prefixes for Scope

Global	g	glngGrandTotal
Local (none)		intCustomerId
Module	m	mcurRunningSum