

**Escuela Superior Politécnica del Litoral**

**Departamento de Ingeniería Eléctrica**

**Sistema General de  
Contabilidad Gubernamental**

**TOPICO DE GRADUACION**

**Previa a la obtención del título de:**

**INGENIERO EN COMPUTACION**

Presentada por:

**TOMAS HABLICH DIAZ  
RICHARD YAGUAL LOZANO  
JORGE ZAMBRANO POGGI**

GUAYAQUIL - ECUADOR  
1996

AGRADECIMIENTO

AL ING. CARLOS  
VALERO

Director de Tópico, por su  
ayuda y colaboración para  
la realización de este trabajo.


**DEDICATORIA**

**A NUESTROS PADRES**

## DECLARACION EXPRESA

“La responsabilidad por los hechos, ideas y doctrinas expuestos este tópico, nos corresponde exclusivamente; y , el patrimonio intelectual de la misma, a la ESCUELA SUPERIOR POLITECNICA DEL LITORAL”.

(Reglamento de Exámenes y Títulos profesionales de la ESPOL).



**Tomás Hablich Díaz**



**Richard Yagual Lozano**



**Jorge Zambrano Poggi**

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## Introducción.

Este sistema trata de aplicar los conocimientos obtenidos en el tópico cliente-servidor, para el desarrollo básico de una aplicación de contabilidad gubernamental. Si bien es cierto tiene un enfoque didáctico contempla todos los principios básicos, y con un poco más de esfuerzo y tiempo puede convertirse en una aplicación comercial.

Se utilizará un lenguaje orientado a objeto y se comparará con lenguajes equivalentes, para determinar la facilidad de desarrollo entre estas herramientas.

## **Descripción General del Proyecto.**

El sistema esta capacitado para registrar los saldos iniciales, movimientos de una institución publica, que tenga autonomía o no, para poder realizar esto, el sistema cuenta con varios módulos que se detallan a continuación.

### **2.1. Plan de Cuentas**

Se registran las cuentas patrimoniales y presupuestarias, registrando el código y su descripción, el sistema automáticamente le asigna el nivel indicado, dependiendo de la cuenta inmediata superior. Se puede realizar el ingreso, modificación y eliminación de las cuentas utilizando las facilidades de este lenguaje (Botones con dibujos representativos de cada operación).

### **2.2. Aperturas**

Se registran los saldos iniciales de las cuentas patrimoniales, en cuyo caso es igual a cualquier contabilidad comercial o empresarial, en el caso del presupuesto se registran los saldos de las cuentas de ingreso y de gasto (detallado por actividad y proyecto), los saldos antes mencionados tienen que cuadrar para poder registrar los mismos.

En el momento que se termina cualquier ventana del presupuesto, se cerraran todas automáticamente.

### **2.3. Movimientos**

Se registran los asientos de diario, control previo (asignación de la partida presupuestaria para los gastos), registros que afectan a las cuentas presupuestarias.

### **2.4. Reportes**

Diario General (con enfoque presupuestario) donde se muestran todas las transacciones, Auxiliares de las cuentas presupuestarias.

### **2.5. Mantenimiento de Tablas**

Se ingresan las actividades y proyectos, se utiliza un utilitario de desarrollo rápido de aplicaciones..



## Análisis y Diseño

**Cuentas.** - que contiene los siguientes campos

código - código de la cuenta

nombre - descripción de la cuenta

tipo - tipo de la cuenta (0 - resumen, 1 - movimiento, 2 - presupuestaria de gasto)

nivel - nivel de la cuenta (1 - 7)

salini - saldo inicial de la cuenta o presupuesto inicial

**Documentos.** - que contiene los siguientes campos

tipo1 - tipo de documento original

numero1 - secuencia del comprobante

tipo2 - tipo de documento asociado (para uso de Control Previo)

numero2 - secuencia del documento asociado

concepto - concepto del comprobante

**Movimientos.**- que contiene los siguientes campos

tipo - tipo de documento

numero - numero secuencial del documento

cuenta - cuenta en la que se registra el movimiento

debe - valor del debe

haber - valor del haber

compromiso - valor del compromiso

obligación - valor de la obligación

pagado - valor del pago

cobrado valor de lo cobrado

**Tbactividad.**- que contiene los siguientes campos

actiproj - código de la actividad y proyecto unidos

nombre - descripción del proyecto

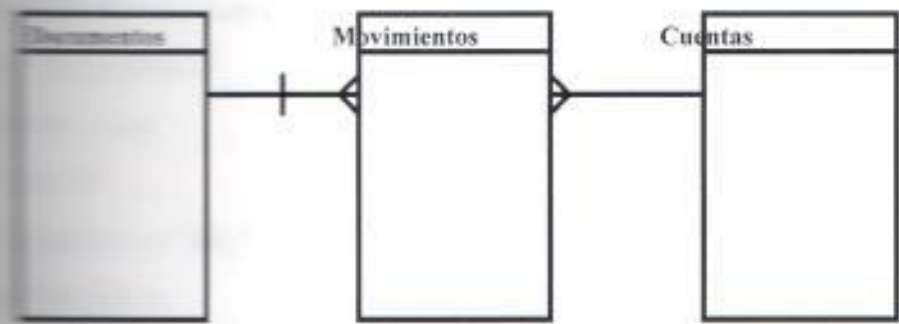
### 3.2. Clases implementadas y objetos que las usan.

**AsientoInicial**- tabla que muestra los saldos, esta clase es utilizada por la forma del asiento de apertura para las cuentas patrimoniales, para las cuentas de ingreso y para las n instancias del las cuentas de egresos.

**Tbmovimiento**- es una tabla que posee todas las columnas para ser utilizadas en los asientos de diario, asiento de ingreso y asiento de egreso

**frmmovimiento**- es una forma que contiene todos los botones y etiquetas, que se usan en cualquier tipo de documento.

### Diagrama Entidad - Relación



## 5.1. Implementación de Clases

Option Button Class: obtopico

Title: 1

Window Location and Size

Left:

Top:

Width: 0.45"

Width Editable? Class Default

Height: 0.354"

Height Editable? Class Default

Visible? Class Default

Font Name: Arial

Font Size: 14

Font Enhancement: Bold

Picture File Name:

Picture Transparent Color: Class Default

Button Style: Class Default

Image Style: Class Default

Text Color: Class Default

Background Color: Class Default

List in Tool Palette? Yes

Property Template:

Class DLL Name:

Description:

Derived From

Class Variables

Instance Variables

Functions

Message Actions

Child Table Class: AsientoInicial

Display Settings

Window Location and Size

Left:

Top:

Width: 4.663"

Width Editable? Class Default

Height: 1.354"

Height Editable? Class Default

Visible? Class Default

Font Name: Class Default

Font Size: Class Default

Font Enhancement: Class Default

Text Color: Class Default

Background Color: Class Default

View: Class Default

Allow Row Sizing? Class Default

Lines Per Row: Class Default

## Memory Settings

Maximum Rows in Memory: Class Default

Discardable? Class Default

Next Class Child Key: 5

List in Tool Palette? Yes

Property Template:

Class DLL Name:

Description:

Derived From

## Contents

Column: colCodigo

Class Child Ref Key: 0

Class ChildKey: 2

Class:

Property Template:

Class DLL Name:

Title:Codigo

Visible? Yes

Editable? No

Maximum Data Length: Default

Data Type: String

Justify: Left

Width: 1.213"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

Column: colNombre

Class Child Ref Key: 0

Class ChildKey: 1

Class:

Property Template:

Class DLL Name:

Title: Descripcion

Visible? Yes

Editable? No

Maximum Data Length: Default

Data Type: String



Justify: Left

Width: 4.3"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options:

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

Column: colValor

Class Child Ref Key: 0

Class ChildKey: 3

Class:

Property Template:

Class DLL Name:

Title: Valor

Visible? Yes

Editable? Yes

Maximum Data Length: Default

Data Type: Number

Justify: Right

Width: 1.425"

Width Editable? Yes

Format: ### ### ##0

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

On SAM\_SetFocus

FieldType=0

Set Prop= SalTblKillEdit( hTabla )

Class: salTpo

Class Child Ref Key: 0

Class Child Key: 4

Class:

Property Template:

Class OLE Name:

Title Type: Not Key

Visible? No

Editable? No

Maximum Data Length: Default

Data Type: Number

Justify: Left

Width: Default

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

Column: colCodigoFmt

Class Child Ref Key: 0

Class ChildKey: 5

Class:

Property Template:

Class DLL Name:

Title:Codigo Formato

Visible? No

Editable? Yes

Maximum Data Length: Default

Data Type: String

Justify: Left

Width: Default

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

Class Variables

Instance Variables

Boolean: btmp

Window Handle: hTabla

Number: nRow

Functions

Message Actions

On SAM\_FetchRowDone

    If colTipo=1

        Call SalTblSetCellTextColor( colCodigo, COLOR\_Red, TRUE )

        Call SalTblSetCellTextColor( colNombre, COLOR\_Red, TRUE )

        Call SalTblSetCellTextColor( colValor, COLOR\_Red, TRUE )

    Set btmp=SalTblSetRowFlags( hWndItem,IParam, ROW\_UserFlag1, FALSE )

    Else

```
Set bmp=SalTblSetRowFlags( hWndItem,lParam, ROW_UserFlag1, TRUE )
```

```
Set colCodigo=fFmtStrCta( colCodigoFmt )
```

Child Table Class: tbMovimiento

#### Display Settings

##### Window Location and Size

Left:

Top:

Width: 4.663"

Width Editable? Class Default

Height: 1.354"

Height Editable? Class Default

Visible? Class Default

Font Name: Class Default

Font Size: 8

Font Enhancement: None

Text Color: Class Default

Background Color: Class Default

View: Class Default

Allow Row Sizing? Class Default

Lines Per Row: Class Default

#### Memory Settings

Maximum Rows in Memory: Class Default

Discardable? Class Default

Next Class Child Key: 11

List in Tool Palette? Yes

Property Template:

Class DLL Name:

Description:

Derived From

Contents

Column: colCodigo

Class Child Ref Key: 0

Class ChildKey: 4

Class:

Property Template:

Class DLL Name:

Title:Codigo

Visible? Yes

Editable? Yes

Maximum Data Length: Default

Data Type: String

Justify: Left

Width: 1.338"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

On SAM\_FieldEdit

If (colCodigo=" or colCodigo=STRING\_Null)

If SalTblQueryRowFlags( hWndForm, IParam, ROW\_Edited )

Call SalTblSetRowFlags( hWndForm, IParam, ROW\_MarkDeleted,

TRUE )

Else If SalTblQueryRowFlags( hWndForm, IParam, ROW\_MarkDeleted )

Call SalTblSetRowFlags( hWndForm, IParam, ROW\_MarkDeleted,

FALSE )

If SalTblQueryRowFlags( hWndForm, IParam, ROW\_Edited) and not

SalTblQueryRowFlags( hWndForm, IParam, ROW\_New)

Set colCodigo=colCodigoFmt

On SAM\_Validate

Set tmpCodigo=colCodigo

! Set nBusca=VisTblFindString( hWndForm, 0, colCodigo, tmpCodigo )

! If nBusca!=IParam

Call SalMessageBox( 'Cuenta duplicada','Movimientos', 0 )

Return VALIDATE\_Cancel



```

Set bFetch=SqlPrepareAndExecute( hBaseTmp, 'select nombre,tipo into
:colNombre,:tmpTipo from cuentas where codigo=:colCodigo' )

If not bFetch
  Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute', 0 )
  Return VALIDATE_Cancel
Call SqlFetchNext( hBaseTmp,n)
If n = FETCH_EOF
  Call SalMessageBox( 'Cuenta no existe', 'Movimientos', 0 )
  Set colCodigo=colCodigoFmt
  Return VALIDATE_Cancel
If TipoCuentas='PRES'
  If SalStrLeftX( colCodigo, 1 )='5' and tmpTipo =2
    Return VALIDATE_Ok
  If SalStrLeftX( colCodigo, 1 )='4' and tmpTipo =1
    Return VALIDATE_Ok
  If SalStrLeftX( colCodigo, 1 )!='4' and SalStrLeftX( colCodigo, 1 )!='5'
    Call SalMessageBox( 'Cuenta no es de presupuesto', 'Movimientos', 0 )
    Return VALIDATE_Cancel
  If tmpTipo=0 or tmpTipo=1
    Call SalMessageBox( 'Cuenta no es de Movimiento', 'Movimientos', 0 )
    Return VALIDATE_Cancel
If TipoCuentas='PATR'
  If SalStrLeftX( colCodigo, 1 )='4' or SalStrLeftX( colCodigo, 1 )='5'
    Call SalMessageBox( 'Cuenta no es Patrimonial', 'Movimientos', 0 )
    Return VALIDATE_Cancel
  If tmpTipo =0

```

Call SalMessageBox( 'Cuenta no es de Movimiento','Movimientos', 0 )

Return VALIDATE\_Cancel

Column: colNombre

Class Child Ref Key: 0

Class ChildKey: 3

Class:

Property Template:

Class DLL Name:

Title: Descripcion

Visible? Yes

Editable? No

Maximum Data Length: Default

Data Type: String

Justify: Left

Width: 2.663"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

Column: colCompromiso

Class Child Ref Key: 0

Class ChildKey: 2

Class:

Property Template:

Class DLL Name:

Title: Compromiso

Visible? Yes

Editable? Yes

Maximum Data Length: Default

Data Type: Number

Justify: Right

Width: 1.075"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

Column: colObligacion

Class Child Ref Key: 0

Class ChildKey: 10

Class:

Property Template:

Class DLL Name:

Title: Obligacion

Visible? Yes

Editable? Yes

Maximum Data Length: Default

Data Type: Number

Justify: Right

Width: 1.075"

Width Editable? Yes

Maximum Data Length: Default

Data Type: Number

Justify: Right

Width: 1.075"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

Column: colCobrado

Class Child Ref Key: 0

Class ChildKey: 5

Class:

Property Template:

Class DLL Name:

Title: Cobrado

Visible? Yes

Editable? Yes

Maximum Data Length: Default

Data Type: Number

Justify: Right

Width: 1.075"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

## Message Actions

Column: colDebe

Class Child Ref Key: 0

Class ChildKey: 7

Class:

Property Template:

Class DLL Name:

Title: Debe

Visible? Yes

Editable? Yes

Maximum Data Length: Default

Data Type: Number

Justify: Right

Width: 1.075"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

## Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

On SAM\_KillFocus

If colDebe!=0 and colDebe!=NUMBER\_Null

Set colHaber=NUMBER\_Null

Column: colHaber

Class Child Ref Key: 0

Class ChildKey: 8

Class:

Property Template:

Class DLL Name:

Title: Haber

Visible? Yes

Editable? Yes

Maximum Data Length: Default

Data Type: Number

Justify: Right

Width: 1.075"

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted



**Cell Options**

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

**List Values****Message Actions**

On SAM\_KillFocus

If colHaber!=0 and colHaber!=NUMBER\_Null

Set colDebe=NUMBER\_Null

**Column: colCodigoFmt**

Class Child Ref Key: 0

Class ChildKey: 11

Class:

Property Template:

Class DLL Name:

Title: CodigoFmt

Visible? No

Editable? Yes

Maximum Data Length: Default

Data Type: String

Justify: Left

Width: Default

Width Editable? Yes

Format: Unformatted

Country: Default

Input Mask: Unformatted

Cell Options

Cell Type? Standard

Multiline Cell? No

Cell DropDownList

Sorted? Yes

Vertical Scroll? Yes

Auto Drop Down? No

Allow Text Editing? Yes

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Yes

List Values

Message Actions

**Class Variables**

Number: n

**Instance Variables**

String: TipoCuentas

Number: nRow

String: sTipo

Number: nWidth

Boolean: bFetch

Number: nFetch

Number: nBusca

String: tmpCodigo

Number: tmpTipo

Number: tmpNivel

#### Functions

#### Message Actions

On SAM\_Create

If sTipo='D'

Call SalTblQueryColumnWidth( colNombre, nWidth )

Call SalTblSetColumnWidth( colNombre, nWidth+1.075 )

If sTipo='I'

Call SalTblQueryColumnWidth( colNombre, nWidth )

Call SalTblSetColumnWidth( colNombre, nWidth+1.075+1.075 )

If sTipo='G'

Call SalTblSetColumnFlags( colCompromiso, COL\_Editable, FALSE )

If sTipo='C'

Call SalTblSetColumnFlags( colObligacion, COL\_Editable, FALSE )

If sTipo='C'

Call SalTblSetColumnFlags( colPagado, COL\_Editable, FALSE )

If sTipo='D' or sTipo='I'

Call SalHideWindow( hWndForm.colCompromiso)

```

If sTipo='D' or sTipo='I'
    Call SalHideWindow( hWndForm.colObligacion)
If sTipo='D' or sTipo='I'
    Call SalHideWindow( hWndForm.colPagado)
If sTipo='C' or sTipo='D' or sTipo='G'
    Call SalHideWindow( hWndForm.colCobrado)
If sTipo='C' or sTipo='I' or sTipo='G'
    Call SalHideWindow( hWndForm.colDebe)
If sTipo='C' or sTipo='I' or sTipo='G'
    Call SalHideWindow( hWndForm.colHaber)
On SAM_RowValidate
    If (colCodigo="" or colCodigo=STRING_Null) and SalTblQueryRowFlags(
hWndForm, lParam, ROW_New )
        Call SalTblDeleteRow( hWndForm, lParam, TBL_NoAdjust )
On SAM_DoubleClick
    Set nRow= SalTblInsertRow( hWndForm, TBL_MaxRow )
    Call SalTblSetFocusCell( hWndForm, nRow, colCodigo, 0, -1 )
On SAM_FetchRowDone
    Set colCodigoFmt=colCodigo
    Set bFetch=SqlPrepareAndExecute( hBaseTmp, 'select nombre into :colNombre
from cuentas where codigo=:colCodigo' )
    If not bFetch
        Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute', 0 )
        Return FALSE
    Call SqlFetchNext( hBaseTmp, nFetch )
Form Window Class: frmMovimiento

```

Title:

Icon File:

Accesories Enabled? Class Default

Visible? Class Default

Display Settings

Display Style? Class Default

Visible at Design time? Yes

Automatically Created at Runtime? Class Default

Initial State: Normal

Maximizable? Class Default

Minimizable? Class Default

System Menu? Class Default

Resizable? Class Default

Window Location and Size

Left:

Top:

Width: 7.813"

Width Editable? Class Default

Height: 4.313"

Height Editable? Class Default

Form Size

Width: Class Default

Height: Class Default

Number of Pages: Class Default

Font Name: Class Default

Font Size: Class Default

Font Enhancement: Class Default

Text Color: Class Default

Background Color: Class Default

Next Class Child Key: 33

List in Tool Palette? Yes

Property Template:

Class DLL Name:

Description:

Derived From

Menu

Tool Bar

Display Settings

Display Style? Class Default

Location? Class Default

Visible? Class Default

Size: Class Default

Size Editable? Class Default

Font Name: Class Default

Font Size: Class Default

Font Enhancement: Class Default

Text Color: Class Default

Background Color: Class Default

Contents

Contents

tbMovimiento: tbl1

Class Child Ref Key: 0

Class ChildKey: 1

Class: tbMovimiento

Property Template:

Class DLL Name:

Display Settings

Window Location and Size

Left: -0.013"

Top: 0.406"

Width: 7.7"

Width Editable? Class Default

Height: 0.917"

Height Editable? Class Default

Visible? Class Default

Font Name: Class Default

Font Size: Class Default

Font Enhancement: Class Default

Text Color: Class Default

Background Color: Class Default

View: Class Default

Allow Row Sizing? Class Default

Lines Per Row: Class Default

Memory Settings

Maximum Rows in Memory: Class Default

Discardable? Class Default

Contents

(untitled) from tbMovimiento: colCodigo

Class Child Ref Key: 4  
Class ChildKey: 2  
Class: tbMovimiento  
Property Template:  
Class DLL Name:  
Title:  
Visible? Class Default  
Editable? Class Default  
Maximum Data Length: Class Default  
Data Type: Class Default  
Justify: Class Default  
Width: Class Default  
Width Editable? Class Default  
Format: Class Default  
Country: Class Default  
Input Mask: Class Default  
Cell Options  
    Cell Type? Class Default  
    Multiline Cell? Class Default  
    Cell DropDownList  
        Sorted? Class Default  
        Vertical Scroll? Class Default  
        Auto Drop Down? Class Default  
        Allow Text Editing? Class Default  
Cell CheckBox  
    Check Value:



Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colNombre

Class Child Ref Key: 3

Class ChildKey: 3

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colCompromiso

Class Child Ref Key: 2

Class ChildKey: 4

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

### Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

### List Values

### Message Actions

(untitled) from tbMovimiento: colObligacion

Class Child Ref Key: 10

Class ChildKey: 5

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colPagado

Class Child Ref Key: 6

Class ChildKey: 6

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Class ChildKey: 7  
Class: tbMovimiento  
Property Template:  
Class DLL Name:  
Title:  
Visible? Class Default  
Editable? Class Default  
Maximum Data Length: Class Default  
Data Type: Class Default  
Justify: Class Default  
Width: Class Default  
Width Editable? Class Default  
Format: Class Default  
Country: Class Default  
Input Mask: Class Default  
Cell Options  
    Cell Type? Class Default  
    Multiline Cell? Class Default  
    Cell DropDownList  
        Sorted? Class Default  
        Vertical Scroll? Class Default  
        Auto Drop Down? Class Default  
        Allow Text Editing? Class Default  
Cell CheckBox  
    Check Value:  
    Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colDebe

Class Child Ref Key: 7

Class ChildKey: 8

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colHaber

Class Child Ref Key: 8

Class ChildKey: 9

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colCodigoFmt

Class Child Ref Key: 11

Class ChildKey: 10

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default



Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

Functions

Window Variables

Message Actions

tbMovimiento: tbl2

Class Child Ref Key: 0

Class ChildKey: 11

Class: tbMovimiento

Property Template:

Class DLL Name:

#### Display Settings

##### Window Location and Size

Left: -0.013"

Top: 1.74"

Width: 7.7"

Width Editable? Class Default

Height: 1.833"

Height Editable? Class Default

Visible? Class Default

Font Name: Class Default

Font Size: Class Default

Font Enhancement: Class Default

Text Color: Class Default

Background Color: Class Default

View: Class Default

Allow Row Sizing? Class Default

Lines Per Row: Class Default

#### Memory Settings

Maximum Rows in Memory: Class Default

Discardable? Class Default

#### Contents

(untitled) from tbMovimiento: colCodigo

Class Child Ref Key: 4

Class ChildKey: 12

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

### Message Actions

(untitled) from tbMovimiento: colNombre

Class Child Ref Key: 3

Class ChildKey: 13

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

### Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colCompromiso

Class Child Ref Key: 2

Class ChildKey: 14

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

### Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

### Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

### List Values

### Message Actions

(untitled) from tbMovimiento: colObligacion

Class Child Ref Key: 10

Class ChildKey: 15

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colPagado

*Class Child Ref Key: 6*

Class ChildKey: 16

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colCobrado

Class Child Ref Key: 5

Class ChildKey: 17

Class: tbMovimiento

Property Template:



Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colDebe

Class Child Ref Key: 7

Class ChildKey: 18

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colHaber

Class Child Ref Key: 8

Class ChildKey: 19

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

(untitled) from tbMovimiento: colCodigoFmt

Class Child Ref Key: 11

Class ChildKey: 20

Class: tbMovimiento

Property Template:

Class DLL Name:

Title:

Visible? Class Default

Editable? Class Default

Maximum Data Length: Class Default

Data Type: Class Default

Justify: Class Default

Width: Class Default

Width Editable? Class Default

Format: Class Default

Country: Class Default

Input Mask: Class Default

Cell Options

Cell Type? Class Default

Multiline Cell? Class Default

Cell DropDownList

Sorted? Class Default

Vertical Scroll? Class Default

Auto Drop Down? Class Default

Allow Text Editing? Class Default

Cell CheckBox

Check Value:

Uncheck Value:

Ignore Case? Class Default

List Values

Message Actions

Functions

Window Variables

Message Actions

Background Text: No.Control

Resource Id: 22569

Class Child Ref Key: 0

Class ChildKey: 21

Class:

Window Location and Size

Left: 0.088"

Top: 0.115"

Width: 0.9"

Width Editable? Yes

Height: 0.167"

Height Editable? Yes

Visible? Yes

Justify: Right

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Data Field: dfNoControl

Class Child Ref Key: 0

Class ChildKey: 22

Class:

Property Template:

Class DLL Name:

Data

Maximum Data Length: 4

Data Type: Number

Editable? Yes

Display Settings

Window Location and Size

Left: 1.088"

Top: 0.073"

Width: 0.825"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Border? Yes

Justify: Left

Format: Unformatted

Country: Default

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Input Mask: Unformatted

Message Actions

On SAM\_Validate

If obInsert and (sTipoT1='G' or sTipoT1='T')

If dfNoControl!=0 and dfNoControl!=NUMBER\_Null

! Leer control previo

Set dbOk=SqlPrepareAndExecute( hBase, "select numero1,concepto1  
into :dfNoControl,:dfCoControl from documentos where tipo1=:TipoDocu1 and  
numero1=:dfNoControl" )

If not dbOk

Call SalMessageBox( 'Error en -prepare.execute-', 'Prepare execute',

0)

Return FALSE

```
Call SqlFetchNext( hBase, retConsulta )
```

```
If retConsulta=FETCH_EOF
```

```
    Call SalMessageBox('Documento no existe','Busqueda',0)
```

```
    Set dfNoControl=NUMBER_Null
```

```
    Set dfCoControl=STRING_Null
```

```
    Call SalTblReset( hTablaAlexandra )
```

```
    Return VALIDATE_Cancel
```

```
Set StrSql="select
```

```
compromiso,obligacion,pagado,cochado,debe,haber,cuenta "||
```

```
    " into :hTablaAlexandra.colCompromiso,
```

```
:hTablaAlexandra.colObligacion,
```

```
:hTablaAlexandra.colPagado,
```

```
:hTablaAlexandra.colCochado, :hTablaAlexandra.colDebe, :hTablaAlexandra.colHaber,
```

```
:hTablaAlexandra.colCodigo " ||
```

```
    " from movimientos where tipo=:TipoDocu1 and
```

```
numero= :dfNoControl"
```

```
    Call SalTblPopulate( hTablaAlexandra, hBase, StrSql, TBL_FillAll )
```

```
Else
```

```
    Set dfNoControl=NUMBER_Null
```

```
    Set dfCoControl=STRING_Null
```

```
    Call SalTblReset( hTablaAlexandra )
```

Background Text: Concepto

Resource Id: 22572

Class Child Ref Key: 0

Class ChildKey: 23

Class:

Window Location and Size



Left: 2.188"

Top: 0.115"

Width: 0.8"

Width Editable? Yes

Height: 0.167"

Height Editable? Yes

Visible? Yes

Justify: Left

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Background Text: Concepto

Resource Id: 22571

Class Child Ref Key: 0

Class ChildKey: 24

Class:

Window Location and Size

Left: 2.188"

Top: 1.448"

Width: 0.8"

Width Editable? Yes

Height: 0.167"

Height Editable? Yes

Visible? Yes

Justify: Left

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Data Field: dfCoControl

Class Child Ref Key: 0

Class ChildKey: 25

Class:

Property Template:

Class DLL Name:

Data

Maximum Data Length: 60

Data Type: String

Editable? Yes

Display Settings

Window Location and Size

Left: 3.188"

Top: 0.073"

Width: 4.5"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Border? Yes

Justify: Left

Format: Unformatted

Country: Default

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Input Mask: Unformatted

Message Actions

Background Text: No.Asiento

Resource Id: 22570

Class Child Ref Key: 0

Class ChildKey: 26

Class:

Window Location and Size

Left: 0.088"

Top: 1.448"

Width: 0.9"

Width Editable? Yes

Height: 0.167"

Height Editable? Yes

Visible? Yes

Justify: Right

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Data Field: dfNoAsiento

Class Child Ref Key: 0

Class ChildKey: 27

Class:

Property Template:

Class DLL Name:

Data

Maximum Data Length: 4

Data Type: Number

Editable? Yes

Display Settings

Window Location and Size

Left: 1.088"

Top: 1.406"

Width: 0.8"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Border? Yes

Justify: Left

Format: Unformatted

Country: Default

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Input Mask: Unformatted

#### Message Actions

Data Field: dfCoAsiento

Class Child Ref Key: 0

Class ChildKey: 28

Class:

Property Template:

Class DLL Name:

#### Data

Maximum Data Length: 60

Data Type: String

Editable? Yes

#### Display Settings

##### Window Location and Size

Left: 3.188"

Top: 1.406"

Width: 4.5"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Border? Yes

Justify: Left

Format: Unformatted

Country: Default

Font Name: Default

Font Size: Default

Font Enhancement: Default

Text Color: Default

Background Color: Default

Input Mask: Unformatted

Message Actions

Option Button: obInsert

Class Child Ref Key: 0

Class ChildKey: 29

Class:

Property Template:

Class DLL Name:

Title:

Window Location and Size

Left: 1.588"

Top: 3.656"

Width: 0.575"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Font Name: Default

Font Size: Default

Font Enhancement: Default

Picture File Name: NEWREC.BMP

Picture Transparent Color: None

Button Style: Check

Image Style: Single

Text Color: Default

Background Color: Default

Message Actions

On SAM\_Click

If obInsert

Call SalEnableWindow(pbAply)

Call SalDisableWindow(obRetrieve)

Set dfNoControl=NUMBER\_Null

Set dfCoControl=STRING\_Null

Set dfNoAsiento=NUMBER\_Null

Set dfCoAsiento=STRING\_Null

Call SalTblReset( hTablaAlexandra )

Call SalTblReset( hTablaSusana )

Else

Call SalDisableWindow(pbAply)

Call SalEnableWindow(obRetrieve)

Option Button: obRetrieve

Class Child Ref Key: 0

Class ChildKey: 30

OK

Property Template:

Class DLL Name:

Title:

Window Location and Size

Left: 2.388"

Top: 3.656"

Width: 0.6"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Font Name: Default

Font Size: Default

Font Enhancement: Default

Picture File Name: RETRIEVE.BMP

Picture Transparent Color: None

Button Style: Check

Image Style: Single

Text Color: Default

Background Color: Default

Message Actions

On SAM\_Click

If sTipoT1='C'

If obRetrieve



```

Set dbOk=SqlPrepareAndExecute( hBase, "select numero1,concepto1
into :dfNoControl,:dfCoControl from documentos where tipo1=:TipoDocu1 and
numero1=:dfNoControl" )

```

```

If not dbOk

```

```

    Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',

```

```

0 )

```

```

    Return FALSE

```

```

Call SqlFetchNext( hBase, retConsulta )

```

```

If retConsulta=FETCH_EOF

```

```

    Call SalMessageBox('Documento no existe', 'Busqueda', 0)

```

```

    Set obRetrieve=FALSE

```

```

    Return FALSE

```

```

Set StrSql="select
compromiso,obligacion,pagado,cochado,debe,haber,cuenta "||

```

```

    " into :hTablaAlexandra.colCompromiso,

```

```

:hTablaAlexandra.colObligacion,

```

```

:hTablaAlexandra.colPagado,

```

```

:hTablaAlexandra.colCochado, :hTablaAlexandra.colDebe, :hTablaAlexandra.colHaber,

```

```

:hTablaAlexandra.colCodigo " ||

```

```

    " from movimientos where tipo=:TipoDocu1 and

```

```

numero=:dfNoControl"

```

```

Call SalTblPopulate( hTablaAlexandra, hBase, StrSql, TBL_FillAll )

```

```

If sTipoT1='G' or sTipoT1='I'

```

```

    If obRetrieve

```

```

        Set dbOk=SqlPrepareAndExecute( hBase, "select
numero1,concepto1,numero2,concepto2 into :dfNoAsiento, :dfCoAsiento,:dfNoControl,
:dfCoControl from documentos where tipo1=:TipoDocu2 and numero1=:dfNoAsiento" )

```

If not dbOk

Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',

0 )

Return FALSE

Call SqlFetchNext( hBase, retConsulta )

If retConsulta=FETCH\_EOF

Call SalMessageBox('Documento no existe','Busqueda',0)

Set obRetrieve=FALSE

Return FALSE

Set StrSql="select

compromiso,obligacion,pagado,cochado,debe,haber,cuenta "||

" into :hTablaSusana.colCompromiso,

:hTablaSusana.colObligacion, :hTablaSusana.colPagado, :hTablaSusana.colCochado,

:hTablaSusana.colDebe, :hTablaSusana.colHaber, :hTablaSusana.colCodigo " ||

" from movimientos where tipo=:TipoDocu2 and

numero= :dfNoAsiento and bandera <> 'P'"

Call SalTblPopulate( hTablaSusana, hBase, StrSql, TBL\_FillAll )

! Copiado de Consulta de Control Previo

If dfNoControl!=0 and dfNoControl != NUMBER\_Null

Set StrSql="select

compromiso,obligacion,pagado,cochado,debe,haber,cuenta "||

" into :hTablaAlexandra.colCompromiso,

:hTablaAlexandra.colObligacion, :hTablaAlexandra.colPagado,

:hTablaAlexandra.colCochado, :hTablaAlexandra.colDebe, :hTablaAlexandra.colHaber,

:hTablaAlexandra.colCodigo " ||

```

" from movimientos where tipo=:TipoDocu1 and
numero= :dfNoControl "
    Else
        Set StrSql="select
compromiso,obligacion,pagado,cochado,debe,haber,cuenta "||
" into :hTablaAlexandra.colCompromiso,
:hTablaAlexandra.colObligacion,           :hTablaAlexandra.colPagado,
:hTablaAlexandra.colCochado, :hTablaAlexandra.colDebe, :hTablaAlexandra.colHaber,
:hTablaAlexandra.colCodigo " ||
" from movimientos where tipo=:TipoDocu2 and
numero= :dfNoAsiento and bandera='P'"
    Call SalTblPopulate( hTablaAlexandra, hBase, StrSql, TBL_FillAll )
    If obRetrieve
        Call SalDisableWindow( obInsert )
        Call SalEnableWindow( pbAply )
        Call SalEnableWindow( pbDelete )
        Call SalDisableWindow(dfNoControl)
    Else
        Call SalDisableWindow(pbAply)
        Call SalEnableWindow(obInsert)
        Call SalEnableWindow(dfNoControl)
    Pushbutton: pbAply
    Class Child Ref Key: 0
    Class ChildKey: 31
    Class:
    Property Template:

```

Class DLL Name:

Title:

Window Location and Size

Left: 3.188"

Top: 3.656"

Width: 0.6"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Keyboard Accelerator: (none)

Font Name: Default

Font Size: Default

Font Enhancement: Default

Picture File Name: APPLY.BMP

Picture Transparent Color: None

Image Style: Single

Text Color: Default

Background Color: Default

Message Actions

On SAM\_Click

    If sTipoT1='C'

        If obInsert

            Set dbOk=SqlPrepareAndExecute( hBase, "select \* from documentos  
where tipo1=:TipoDocu1 and numero1=:dfNoControl" )

        If not dbOk

```

    Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',
0 )

    Return FALSE
Call SqlFetchNext( hBase, retConsulta )
If retConsulta!=FETCH_EOF
    Call SalMessageBox('Documento ya existe','Grabacion',0)
    Return FALSE
    Set dbOk=SqlPrepareAndExecute( hBase, "insert into documentos
(tipo1,numero1,concepto1) values (:TipoDocu1, :dfNoControl, :dfCoControl)" )
    If not dbOk
        Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',
0 )

        Return FALSE
    If obRetrieve
        Set dbOk=SqlPrepareAndExecute( hBase, "update documentos set
concepto1= :dfCoControl where tipo1= :TipoDocu1 and numero1 = :dfNoControl" )
        If not dbOk
            Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',
0 )

            Return FALSE
        If pbDelete
            Set dbOk=SqlPrepareAndExecute( hBase, "delete from documentos
where tipo1= :TipoDocu1 and numero1 = :dfNoControl" )
            If not dbOk
                Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',
0 )

```

Return FALSE

Set dbOk=SqlPrepareAndExecute( hBase, "delete from movimientos  
where tipo= :TipoDocu1 and numero = :dfNoControl" )

If not dbOk

Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',

0 )

Return FALSE

! Actualizacion de la tabla en la base

If obRetrieve or obInsert

Set StrSql="update movimientos set compromiso =  
:hTablaAlexandra.colCompromiso, obligacion=:hTablaAlexandra.colObligacion, "||

" pagado = :hTablaAlexandra.colPagado

,cobrado=:hTablaAlexandra.colCobrado, debe=:hTablaAlexandra.colDebe,

haber=:hTablaAlexandra.colHaber "||

" where tipo=:TipoDocu1 and numero= :dfNoControl  
and cuenta = :hTablaAlexandra.colCodigoFmt"

Call SqlPrepare(hBase,StrSql)

Call SalTblDoUpdates(hTablaAlexandra, hBase, TRUE )

Set StrSql="insert into movimientos (tipo, numero, compromiso,  
obligacion, pagado ,cobrado, debe, haber, cuenta, bandera)"||

" values (:TipoDocu1, :dfNoControl,  
:hTablaAlexandra.colCompromiso, :hTablaAlexandra.colObligacion,

:hTablaAlexandra.colPagado, :hTablaAlexandra.colCobrado, :hTablaAlexandra.colDebe,

"||

":hTablaAlexandra.colHaber, :hTablaAlexandra.colCodigo, ')"

Call SqlPrepare(hBase,StrSql)

```

    Call SalTblDoInserts(hTablaAlexandra, hBase, TRUE )
        Set StrSql="delete from movimientos where tipo=:TipoDocu1 and
numero= :dfNoControl and cuenta = :hTablaAlexandra.colCodigoFmt "
    Call SqlPrepare(hBase,StrSql)
    Call SalTblDoDeletes(hTablaAlexandra, hBase, ROW_MarkDeleted )
    If sTipoT1='G' or sTipoT1='I'
        If obInsert
            Set dbOk=SqlPrepareAndExecute( hBase, "select * from documentos
where tipo1=:TipoDocu2 and numero1=:dfNoAsiento" )
            If not dbOk
                Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',
0 )

                Return FALSE
            Call SqlFetchNext( hBase, retConsulta )
            If retConsulta!=FETCH_EOF
                Call SalMessageBox('Asiento ya existe', 'Grabacion', 0)
                Return FALSE
            If dfNoControl=0 or dfNoControl=NUMBER_Null
                Set dbOk=SqlPrepareAndExecute( hBase, "insert into documentos
(tipo1,numero1,concepto1) values (:TipoDocu2,:dfNoAsiento,:dfCoAsiento)" )
            Else
                Set dbOk=SqlPrepareAndExecute( hBase, "insert into documentos
(tipo1,numero1,concepto1,tipo2,numero2,concepto2) values
(:TipoDocu2,:dfNoAsiento,:dfCoAsiento,:TipoDocu1,:dfNoControl,:dfCoControl)" )
            If not dbOk

```

Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',

0)

Return FALSE

If obRetrieve

Set dbOk=SqlPrepareAndExecute( hBase, "update documentos set  
concepto1= :dfCoAsiento where tipo1= :TipoDocu2 and numero1 = :dfNoAsiento" )

If not dbOk

Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',

0)

Return FALSE

If pbDelete

Set dbOk=SqlPrepareAndExecute( hBase, "delete from documentos  
where tipo1= :TipoDocu2 and numero1 = :dfNoAsiento" )

If not dbOk

Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',

0)

Return FALSE

Set dbOk=SqlPrepareAndExecute( hBase, "delete from movimientos  
where tipo= :TipoDocu2 and numero = :dfNoAsiento" )

If not dbOk

Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute',

0)

Return FALSE

! Actualizacion de la tabla en la base

If obRetrieve or obInsert



```

Set strSql="update movimientos set compromiso =
:hTablaSusana.colCompromiso, obligacion=:hTablaSusana.colObligacion, "||
" pagado = :hTablaSusana.colPagado
,cobrado=:hTablaSusana.colCobrado, debe=:hTablaSusana.colDebe,
haber=:hTablaSusana.colHaber "||
" where tipo=:TipoDocu2 and numero= :dfNoAsiento
and cuenta = :hTablaSusana.colCodigo "
Call SqlPrepare(hBase,StrSql)
Call SalTblDoUpdates(hTablaSusana, hBase, TRUE )
Set strSql="insert into movimientos (tipo, numero, compromiso,
obligacion, pagado ,cobrado, debe, haber, cuenta,bandera)"||
" values (:TipoDocu2, :dfNoAsiento,
:hTablaSusana.colCompromiso, :hTablaSusana.colObligacion,
:hTablaSusana.colPagado, :hTablaSusana.colCobrado, :hTablaSusana.colDebe, "||
":hTablaSusana.colHaber, :hTablaSusana.colCodigo, ')"
Call SqlPrepare(hBase,StrSql)
Call SalTblDoInserts(hTablaSusana, hBase, TRUE )
! Copiado de Actualizacion de Control Previo
If dfNoControl!=0 and dfNoControl!=NUMBER_Null
Set strSql="update movimientos set compromiso =
:hTablaAlexandra.colCompromiso, obligacion=:hTablaAlexandra.colObligacion, "||
" pagado = :hTablaAlexandra.colPagado
,cobrado=:hTablaAlexandra.colCobrado, debe=:hTablaAlexandra.colDebe,
haber=:hTablaAlexandra.colHaber "||
" where tipo=:TipoDocu1 and numero=
:dfNoControl and cuenta = :hTablaAlexandra.colCodigoFmt"

```

```
Call SqlPrepare(hBase,StrSql)
```

```
Call SalTblDoUpdates(hTablaAlexandra, hBase, TRUE )
```

```
Else
```

```
Set StrSql="update movimientos set compromiso =
:hTablaAlexandra.colCompromiso, obligacion=:hTablaAlexandra.colObligacion, "||
```

```
" pagado = :hTablaAlexandra.colPagado
,cobrado=:hTablaAlexandra.colCobrado, debe=:hTablaAlexandra.colDebe,
```

```
haber=:hTablaAlexandra.colHaber "||
```

```
" where tipo=:TipoDocu2 and numero=
:dfNoAsiento and cuenta = :hTablaAlexandra.colCodigoFmt"
```

```
Call SqlPrepare(hBase,StrSql)
```

```
Call SalTblDoUpdates(hTablaAlexandra, hBase, TRUE )
```

```
Set StrSql="insert into movimientos (tipo, numero, compromiso,
obligacion, pagado ,cobrado, debe, haber, cuenta, bandera)"||
```

```
" values (:TipoDocu2, :dfNoAsiento,
:hTablaAlexandra.colCompromiso, :hTablaAlexandra.colObligacion,
```

```
:hTablaAlexandra.colPagado, :hTablaAlexandra.colCobrado, :hTablaAlexandra.colDebe,
:hTablaAlexandra.colHaber,"||
```

```
" :hTablaAlexandra.colCodigo, 'P')"
```

```
Call SqlPrepare(hBase,StrSql)
```

```
Call SalTblDoInserts(hTablaAlexandra, hBase, TRUE )
```

```
Set StrSql="delete from movimientos where tipo=:TipoDocu2 and
numero= :dfNoAsiento and cuenta = :hTablaAlexandra.colCodigoFmt "
```

```
Set StrSql="delete from movimientos where tipo=:TipoDocu2 and
numero= :dfNoControl and cuenta = :hTablaSusana.colCodigoFmt "
```

```
Call SqlPrepare(hBase,StrSql)
```

```
Call SalTblDoDeletes(hTablaSusana, hBase, ROW_MarkDeleted )
Call SalDisableWindow( pbDelete )
Call SalEnableWindow( obInsert )
Call SalEnableWindow( obRetrieve )
Call SalDisableWindow( pbAply )
Set obInsert=FALSE
Set obRetrieve=FALSE
Set pbDelete=FALSE
Call SalEnableWindow(dfNoControl)
Call SalEnableWindow(dfNoAsiento)
```

Pushbutton: pbExit

Class Child Ref Key: 0

Class ChildKey: 32

Class:

Property Template:

Class DLL Name:

Title:

Window Location and Size

Left: 4.788"

Top: 3.656"

Width: 0.5"

Width Editable? Yes

Height: 0.25"

Height Editable? Yes

Visible? Yes

Keyboard Accelerator: (none)

Font Name: Default

Font Size: Default

Font Enhancement: Default

Picture File Name: CLOSE.BMP

Picture Transparent Color: None

Image Style: Single

Text Color: Default

Background Color: Default

Message Actions

    On SAM\_Click

        Call SalDestroyWindow( hWndForm )

Option Button: pbDelete

Class Child Ref Key: 0

Class ChildKey: 33

Class:

Property Template:

Class DLL Name:

Title:

Window Location and Size

    Left: 3.988"

    Top: 3.656"

    Width: 0.6"

    Width Editable? Yes

    Height: 0.25"

    Height Editable? Yes

Visible? Yes

Font Name: Default

Font Size: Default

Font Enhancement: Default

Picture File Name: DELREC.BMP

Picture Transparent Color: None

Button Style: Check

Image Style: Single

Text Color: Default

Background Color: Default

Message Actions

On SAM\_Click

    If pbDelete

        Call SalEnableWindow(pbAply )

        Call SalDisableWindow( obRetrieve )

        Call SalDisableWindow( obInsert )

        Set obRetrieve = FALSE

    Else

        Call SalDisableWindow(pbAply )

        Call SalDisableWindow(pbDelete )

        Call SalEnableWindow( obRetrieve )

        Call SalEnableWindow( obInsert )

Class Variables

Instance Variables

    Number: retConsulta

    String: StrSql

    Boolean: dbOk

String: sTipoT1

String: sTipoT2

Window Handle: hTablaAlexandra

Window Handle: hTablaSusana

String: TipoDocu1

String: TipoDocu2

Functions

Message Actions

On SAM\_Create

Set tbl1.sTipo=sTipoT1

Set tbl2.sTipo=sTipoT2

Set tbl1.TipoCuentas = 'PRES'

Set tbl2.TipoCuentas = 'PATR'

Call SalDisableWindow( pbAply )

Call SalDisableWindow( pbDelete )

## 5.2 Implementación de Funciones

Return sCuenta

If SalStrMidX( fCuenta, 6,3 )!=""

Set sCuenta=sCuenta||'.'|| SalStrMidX( fCuenta, 6,3 )

Else

Return sCuenta

Return sCuenta

Function: fFmtCtaStr

Description: Convierte una cadena a una cuenta

Returns

String: sCuenta

Parameters

String: fCuenta

Static Variables

Local variables

String: sCuenta

Actions

Set sCuenta=""

Set sCuenta = SalStrMidX( fCuenta, 0,1 )||

SalStrMidX( fCuenta, 2,1 )||

SalStrMidX( fCuenta, 4,2 )||

SalStrMidX( fCuenta, 7,2 )||

SalStrMidX( fCuenta, 10,3)

Return sCuenta

Function: fExistCta

Description:

Returns

Boolean: bExists

Parameters

Sql Handle: hBase

String: ctaCodigo

Static Variables

Local variables

Boolean: dbOK

Number: retCuenta

Actions

Set dbOk=SqlPrepareAndExecute( hBase, 'select \* from cuentas where codigo = :ctaCodigo' )

If not dbOk

Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute', 0 )

Call SqlFetchNext( hBase, retCuenta )

If retCuenta=FETCH\_EOF

Return FALSE

Else

Return TRUE

Function: fExistCtaPadre

Description: Busca cuenta superior y retorna el tipo de la misma

Returns

Boolean: bExiste

Parameters

Sql Handle: hBase

Receive String: ctaPadre

Receive Number: ctaTipo



Receive Number: ctaNivel

Static Variables

Local variables

Boolean: dbOK

Number: retCuenta

Actions

Select Case (SalStrLength( ctaPadre ))

Case 1

Set ctaTipo=0

Set ctaNivel=0

Set ctaPadre=""

Return TRUE

Break

Case 2

Set ctaPadre=SalStrLeftX(ctaPadre,1)

Break

Case 4

If SalStrLeftX(ctaPadre,1)='4' AND SalStrRightX( ctaPadre, 1 )!='0'

Set ctaPadre=SalStrLeftX(ctaPadre,3)||'0'

Else

Set ctaPadre=SalStrLeftX(ctaPadre,2)

Break

Case 6

If SalStrLeftX(ctaPadre,1)='4' AND SalStrRightX( ctaPadre, 1 )!='0'

Set ctaPadre=SalStrLeftX(ctaPadre,5)||'0'

Else

```
Set ctaPadre=SalStrLeftX(ctaPadre,4)
```

```
Break
```

```
Case 9
```

```
Set ctaPadre=SalStrLeftX(ctaPadre,6)
```

```
Break
```

```
Default
```

```
Return FALSE
```

```
Set ctaPadre=""
```

```
Break
```

```
Set dbOk=SqlPrepareAndExecute( hBase, 'select tipo,nivel into :ctaTipo,:ctaNivel
from cuentas where codigo = :ctaPadre' )
```

```
If not dbOk
```

```
Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute', 0 )
```

```
Call SqlFetchNext( hBase, retCuenta )
```

```
If retCuenta=FETCH_EOF
```

```
Return FALSE
```

```
Else
```

```
Return TRUE
```

Function: fExistCtaHija

Description: Busca cuenta inferior

Returns

Boolean: bExiste

Parameters

Sql Handle: hBase

String: ctaCodigo

Static Variables

## Local variables

Boolean: dbOK  
 Number: retCuenta  
 String: tmpCodigo  
 String: ctaCodigoFin

## Actions

```

If SalStrLeftX(ctaCodigo,1)='4'
  Select Case (SalStrLength( ctaCodigo ))
    Case 4
      Set ctaCodigoFin=SalStrLeftX(ctaCodigo,3)||'999'
      Break
    Case 6
      Set ctaCodigoFin=SalStrLeftX(ctaCodigo,5)||'9999'
      Break
    Default
      Set ctaCodigoFin=ctaCodigo||'999'
      Break
  Else
    Set ctaCodigoFin=ctaCodigo||'999'
    Set dbOk=SqlPrepareAndExecute( hBase, 'select codigo into :tmpCodigo from
cuentas where codigo > :ctaCodigo and codigo <=:ctaCodigoFin' )
    If not dbOk
      Call SalMessageBox( 'Error en -prepare,execute-', 'Prepare execute', 0 )
    Call SqlFetchNext( hBase, retCuenta )
    If retCuenta=FETCH_EOF
      Return FALSE
  
```

Else

Return TRUE

Function: fLongitudValidaCta

Description:

Returns

Boolean: ctaValida

Parameters

String: ctaCodigo

Static Variables

Local variables

Actions

Select Case (SalStrLength( ctaCodigo ))

Case 0

Return TRUE

Break

Case 1

Return TRUE

Break

Case 2

Return TRUE

Break

Case 4

Return TRUE

Break

Case 6

Return TRUE

Break

Case 9

Return TRUE

Break

Default

Return FALSE

Break

Function: fLeeTabla

Description:

Returns

Parameters

Static Variables

Local variables

Actions

## **Conclusiones y Recomendaciones**

SQL-Windows es la mejor herramienta de las que hemos analizado, ya que tiene muchos utilitarios para el desarrollo de “aplicaciones rápidas”, cuenta con una extensa gama de funciones pre-elaboradas que ahorran tiempo de programación. Permite la confección de prototipos, sin entrar en detalles de programación, lo cual es muy útil en el momento del diseño de un sistema ya que este puede ser llevado a un proyecto final reutilizando el mismo.

Este lenguaje de programación, necesita de un estudio inicial, superior al utilizado en un lenguaje convencional, por la gama de funciones que posee y por la estructuración peculiar de este. Además los módulos que genere el usuario, son completamente reutilizables, independientes y elaborados (desde una simple función hasta una forma completa) como el diseñador lo desee.

Recomendamos el uso de este lenguaje en aplicaciones serias, complejas, para trabajar en una arquitectura Cliente-Servidor, en la que se justifique el costo inicial de aprendizaje y elaboración de las clases. Para aplicaciones informales o rápidas, se pueden utilizar sin la elaboración de clases, y con los utilitarios predefinidos, lo que reduciría el costo.

## **Bibliografía.-**

- Manual de SQL-Windows
- Manual General de Contabilidad gubernamental - edicion 1995
- Manual especializado de contabilidad para municipios
- Manual especializado de contabilidad para establecimientos de educacion

superior