



Topaz Systems, Inc. SigCard (ACCESS)

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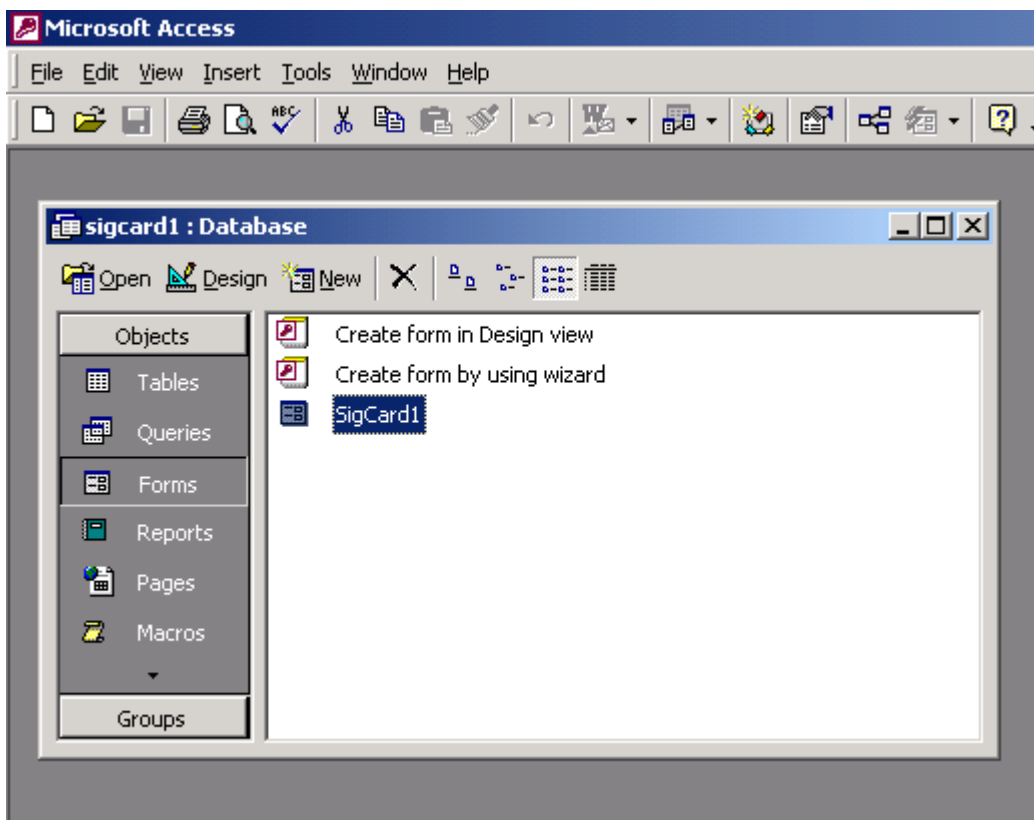
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Welcome to the Topaz SigCard Demo. This demo can be used to better understand how to implement a card reader in use with SigCard in a Microsoft Access environment.

To download the demo go to:


http://www.topazsystems.com/software/download/access/sigcard1_access.zip

Begin by opening “sigcard1.mdb.” It will be located in the .zip file you downloaded from topazsystems.com. The screen below will appear.



Click on “SigCard1”, shown above, and you will open the database (shown below).

The screenshot shows the SigCard1 application window. At the top, there are two dropdown menus: 'Com Port' set to '1' and 'Connection' set to 'Serial'. To the right of these are two buttons: 'Open Port' and 'Close Port'. Below these are three data fields: 'FirstName' with the value 'E A', 'LastName' with the value 'Smith', and 'CardData' with the value ';7083550007381469004=01008764125490929?'. At the bottom, there is a record navigation bar showing 'Record: 1 of 3' with navigation icons.

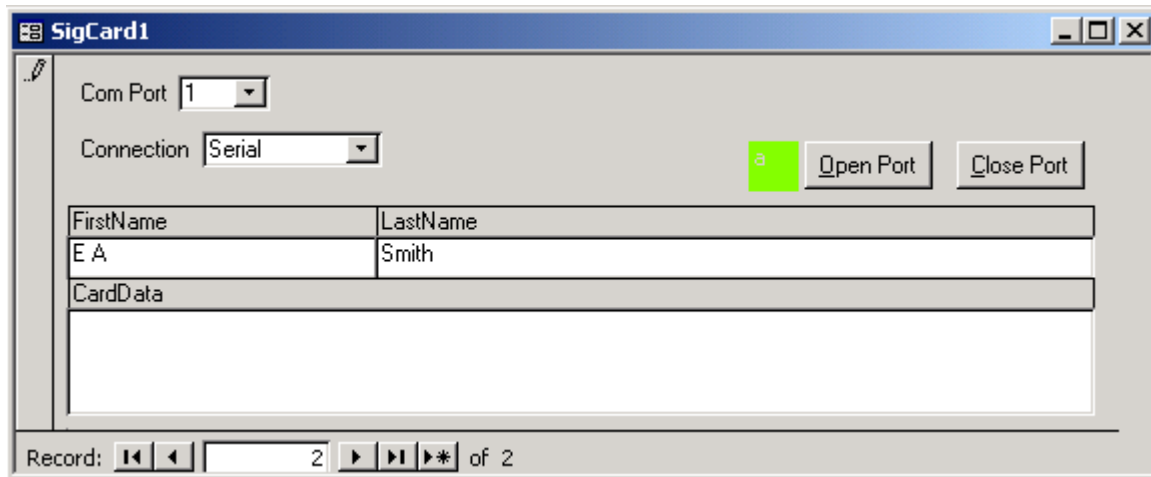
To add a new user click . You will be taken to a new record as shown below.

The screenshot shows the SigCard1 application window with a new record. The 'Com Port' and 'Connection' settings are the same as in the previous screenshot. The 'Open Port' and 'Close Port' buttons are also present. The 'FirstName' and 'LastName' fields are empty, and the 'CardData' field is also empty. The record navigation bar at the bottom shows 'Record: 2 of 2'.

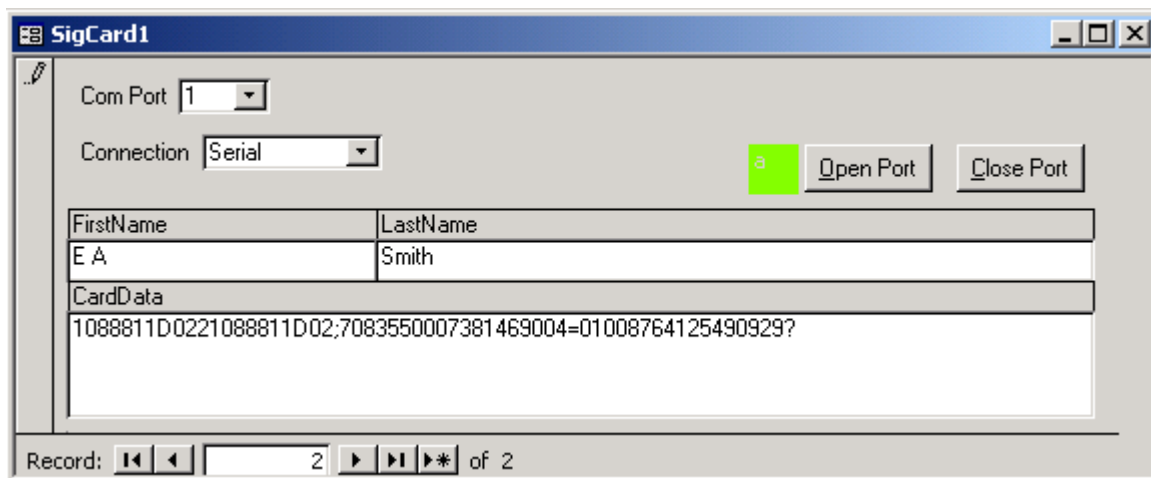
Enter your name information. Also make sure the connection type and com port match your device and setup. In the case of this demo, we used a serial device set to COM 1. After your information has been inputted click “Open Port” to open the port to accept card data.

The screenshot shows the SigCard1 application window with the 'Open Port' button highlighted by a red circle. The 'FirstName' and 'LastName' fields now contain 'E A' and 'Smith' respectively. The 'CardData' field is empty. The record navigation bar at the bottom shows 'Record: 2 of 2'.

Once the port is open you will see the green box indicator as shown below. This does not verify that the device is plugged in and working properly it only means that that port was opened successfully. If you see the green indicator, swipe your card through your card reader.



If everything is setup correctly the card data will be displayed in the CardData text box as an ascii hex string.



The Code

CmdClose() is used to close the port, change the color of the indicator box to default gray, and turn off the timer.

```
Private Sub cmdClose_Click()  
SigCard1.SetCardState 0  
lblState.BackColor = -2147483633  
Timer1.Enabled = False  
End Sub
```

CmdOpen() is used to close the port, assign a connection type and COMPORT based on user input, and then reopen the port. IntAns then checks to see if the port opened successful, and returns accordingly.

```
Private Sub cmdOpen_Click()  
SigCard1.SetCardState 0  
  
If cboType.Value = "Serial" Then  
    SigCard1.MsrType = 0  
    SigCard1.SetComPort cboPort.Value  
Else  
    SigCard1.MsrType = 6  
End If  
intAns = SigCard1.SetCardState(1)  
If intAns = 0 Then  
    'open success  
    'cmdOpenPort.Enabled = False  
    lblState.BackColor = 65408  
ElseIf intAns = 1 Then  
    lblState.BackColor = -2147483633  
    MsgBox "Error Opening Port." & vbCrLf & vbCrLf & "Either it does not exist or is already  
in use.", vbOKOnly + vbExclamation, "Error Opening Port " & Combo1.Text  
ElseIf Err.Number = 2 Then  
    lblState.BackColor = -2147483633  
    MsgBox "Error Reading MSR Device", vbOKOnly + vbExclamation, "Error Reading MSR"  
End If  
End Sub
```

Below the defaults are set for the drop down menus.

```
Private Sub Form_Load()  
cboPort.Value = 1  
cboType.Value = "Serial"  
End Sub
```

When you swipe the card the data can be collected in separate lots. The CardReceived event can fire more than once for one card swipe. Therefore data is gathered in pieces in the invisible temporary text field. The timer checks the temp text field every half second (500ms), looking for more than two characters of data. If it does not find more than two characters it exits the sub. If however it finds more than two characters then it looks for the carriage return character and the "?" character. These two characters together indicate that card data collection is complete. The code then looks for "21088811D02." This string is the data given to the developer based upon a successful opening of the port with the card swipe

reader connected. This string is an indicator string so it is removed completely. If this string is not present than we have the complete card data. At this point we assign this card data to a string variable called strHolder. Finally the strHolder data is transferred to the visible text field where the user sees the card data.

```
Private Sub Form_Timer()
On Error GoTo EH
'if the last two characters of the data are ?Lf, then we are done
'Form.Refresh
'txtTempData.SetFocus
If Len(txtTempData.Text) > 2 Then
'If Asc(Right(txtTempData.Text, 1)) = 13 And Mid(txtTempData.Text,
Len(txtTempData.Text) - 2, 1) = "?" Then
If Mid(txtTempData.Text, Len(txtTempData.Text) - 0, 1) = "?" Then
'Timer1.Enabled = False
Dim strHolder As String
If Left(txtTempData.Text, 11) = "21088811D02" Then
'remove the "initialize success" string\
strHolder = Right(txtTempData.Text, Len(txtTempData.Text) - 12)
'txtTempData.Text = Right(txtTempData.Text, Len(txtTempData.Text) - 12)
Else
strHolder = txtTempData.Text
End If
'MsgBox "Here's the final card data: " & vbCrLf & vbCrLf & Text1.Text
CardData.SetFocus
CardData.Value = ""
CardData.Value = strHolder
txtTempData.SetFocus
txtTempData.Text = ""
'Timer1.Enabled = True
End If
End If
Exit Sub
EH:
End Sub
```

When you close the database, the below code turns the timer off and closes the port.

```
Private Sub Form_Unload(Cancel As Integer)
SigCard1.SetCardState 0
'Timer1.Enabled = False
End Sub
```

This subroutine assigns the data from the card to be displayed in the CardData text box.

```
Private Sub SigCard1_CardReceived()
txtTempData.SetFocus
txtTempData.Text = txtTempData.Text & SigCard1.GetCardData
End Sub
```

For more information regarding products and support
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