



How-To Guide

Crystal Report Demo

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Overview

Welcome to the TopazRecordDemo using Access and Crystal Reports. Before running the TopazRecordDemo VB Project, please make sure that:

1. The following files and folders are present:

- a. SignMeUpNE.mdb (This is zipped up in the attachment. Please copy to your C: directory).
- b. SignatureFolder (You must create a folder named "SignatureFolder" and place it in your C: directory).
- c. Scrrun.dll (You must have the scrrun.dll loaded and registered on your machine. A copy is included in this zip in case you don't have it).

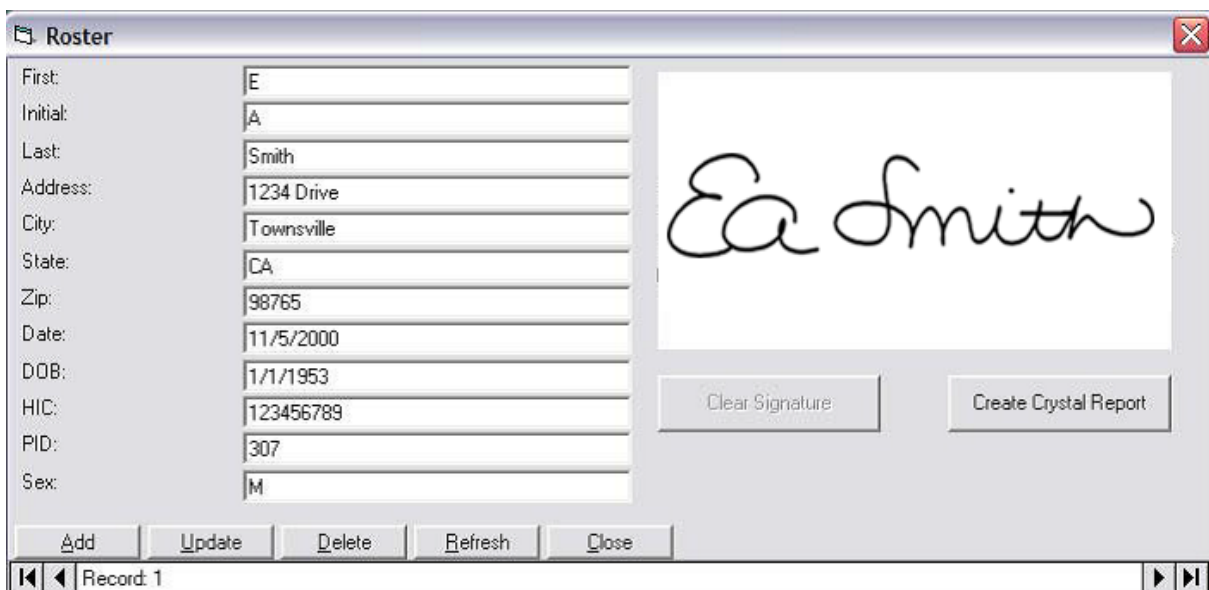
2. The following references are checked in the VB project:

- a. Microsoft ActiveX Data Objects 2.0 library
- b. Microsoft Databinding Collection
- c. Crystal Reports 8.5 ActiveX Designer design & runtime library
- d. Crystal Reports 8.5 ActiveX Designer Runtime library

3. The following components are checked in the VB Project:

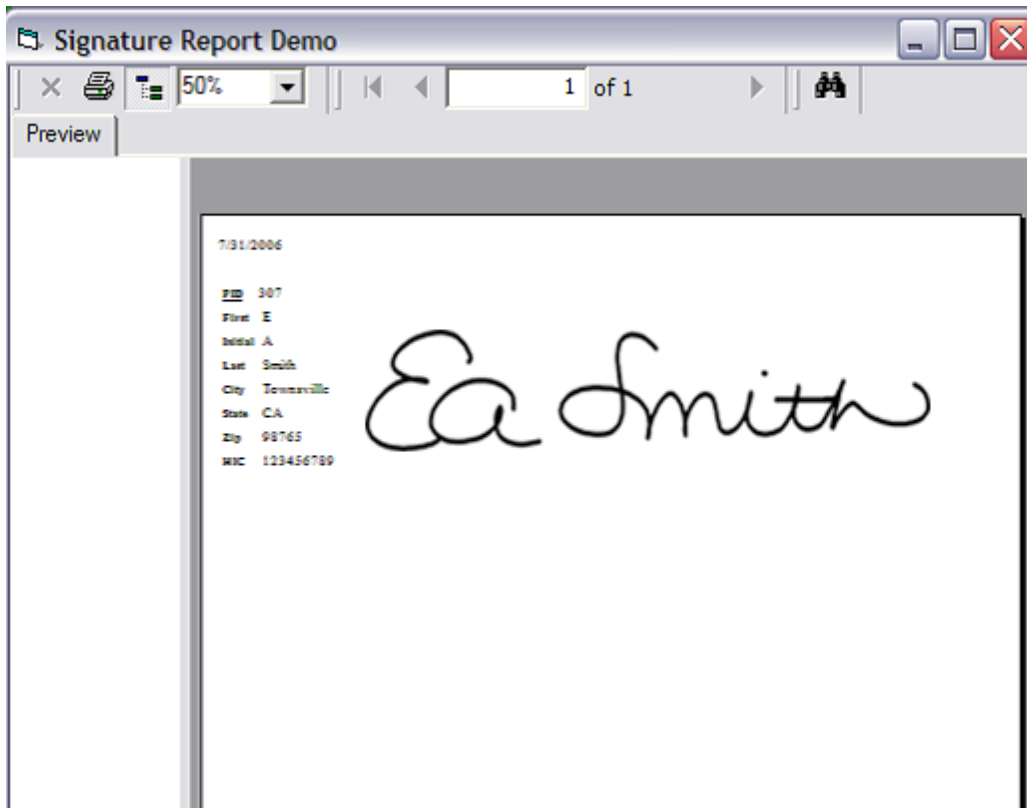
- a. Microsoft ADO Data Control 2.0
- b. Crystal Reports Viewer Control
- c. SigPlus ActiveX module

After checking for the above components, run the Topaz Record Demo. You will see the window below. The records you see are from the access .mdb file you downloaded in the Topaz Record Demo kit (SignMeUpNE.mdb). To add an entry, push "Add", and make sure you fill in all of the required fields. When you have completely filled out the form, add your signature and push "Update" to add your file to the database. When you are ready to create a Crystal Report, choose a signed record and push "Create Crystal Report".



The screenshot shows a window titled "Roster" with a close button in the top right corner. On the left, there is a vertical list of labels with corresponding text boxes: First (E), Initial (A), Last (Smith), Address (1234 Drive), City (Townsville), State (CA), Zip (98765), Date (11/5/2000), DOB (1/1/1953), HIC (123456789), PID (307), and Sex (M). To the right of these fields is a large white area containing a handwritten signature "Ea Smith". Below the signature area are two buttons: "Clear Signature" and "Create Crystal Report". At the bottom of the window, there is a row of five buttons: "Add", "Update", "Delete", "Refresh", and "Close". The status bar at the very bottom shows "Record: 1" with navigation arrows on either side.

Below is the Crystal Report created using the information on page 3.



This application is quite simple. When the Crystal report is created, a BMP image of the signature is created then stored in the C:\SignatureFolder directory. This BMP is named by another field of the database: the PID field (this is an autonumber). This way, the image file name will match the PID field, and the record's signature image file can be matched to the particular record. The signature BMP is then brought into the Crystal Report for viewing the record. When the Crystal Report is closed, the BMP in the "SignatureFolder" is destroyed to clean up. The signature image is meant only for viewing in the Crystal Report, while the actual biometric signature remains saved in your Access database.

On the following pages, we will explore the code that controls the process.

The Code

1. The code below is run when you push the “Create Crystal Report” button and is used to write the selected image to a Crystal Report. First it turns the tablet off and does not clear the image. It then sets the appropriate dimensions using SigPlus and also allows for a time and date stamp to be affixed to the signature. Next it creates a filename for the Bitmap, writes the desired signature to that location, hides the Record menu, and brings up the Crystal Report.

```

Private Sub cmdCrystalReport_Click()
    Dim TextSize As String
    Dim strPath As String
    SigPlus1.TabletState = 0 'Make sure the tablet is off
    cmdClear.Enabled = False

    With SigPlus1
        .ImageFileFormat = 1 'Sets the image type to be saved-JPG,BMP,TIF etc. (1 is a BMP)
        .ImageXSize = 1500 'Sets the X resolution (in pixels)
        .ImageYSize = 500 'Sets the Y resolution (in pixels)
        .ImagePenWidth = 14 'Sets the width of ink for image
        .ImageTimeStamp = False 'Set this to TRUE if you want automatic time/date stamping

        If .ImageTimeStamp = True Then 'If you want the time/date stamp, then do this routine
            TextSize = Int(.TabletLogicalYSize * 14) / 100 * 0.9 'Gets a good size for the text, if
                displaying time/Date stamp
            .ImageTimeStampSize = TextSize 'Sets the size of the Text
            .AutoTimeStamp 'Performs time/Date stamping
        End If
    End With

    SigPlus1.JustifyMode = 5 'This will zoom the signature to fit the control...otherwise, you may leave it to be
        the size it was when signed
    strPath = "C:\SignatureFolder\Signature" & datPrimaryRS.Recordset.Fields(10).Value & ".bmp"
    'Builds the the full path, as well as file extension, naming the file by the PID field (primary key) of the db

    SigPlus1.WriteImageFile (strPath) 'Writes the image; be sure to pass it the full path, as well as file
        extension
    strPath = ""

    TopazRecords.Hide
    CrystalReportForm.Show
End Sub

```

2. The code below loads the Crystal Report application and changes the cursor temporarily to an hourglass while it is loading.

```

Dim Report As New CrystalReport1
Private Sub Form_Load()
    Screen.MousePointer = vbHourglass
    CRViewer1.ReportSource = Report
    CRViewer1.ViewReport
    Screen.MousePointer = vbDefault
End Sub

```

3. The code above displays the desired entry in the Crystal Report. This is done by checking every PID number against the BMP filename saved in the SignatureFolder (see number 1). If the record matches the filename designated in step 1 above, the bitmap is displayed in the Crystal Report.

```
Private Sub Section10_Format(ByVal pFormattingInfo As Object)
If Field1.Value = TopazRecords.datPrimaryRS.Recordset.Fields(10).Value Then
    Dim bmpHold As StdPicture
    Dim strPicturePath As String

    strPicturePath = "C:\SignatureFolder\Signature" &
    TopazRecords.datPrimaryRS.Recordset.Fields(10).Value & ".bmp"

    Set bmpHold = LoadPicture(strPicturePath)

    Set Picture1.FormattedPicture = bmpHold 'Load the signature image into the image on the Crystal
    Report

    Set bmpHold = Nothing
Else
    Section10.Suppress = True ' Otherwise, suppress the record and don't print it on the report
End If
End Sub
```

This demo is only designed to give VB developers an example of how Topaz signature capture technology can be used to capture signatures in Access and return them in a Crystal Report. It is not intended as an application, but rather as help to those desiring to create their own application for Access and Crystal Reports using VB.