



How-To Guide

SigIDp ASP Demo

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Overview

NOTE: SigIDp SDK is no longer a supported Topaz SDK. Please use SigIDp1: www.topazsystems.com/sigidp1.html.

This demo is for use with the [TF-LBK463-HSB-R](#) and the [TF-LBK464-HSB-R](#).

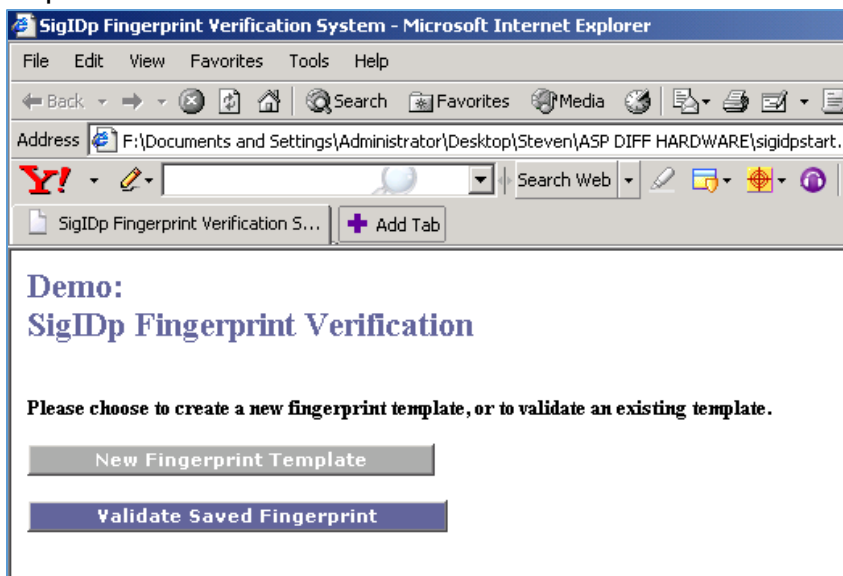


Welcome to the Topaz SigIDp Verification System Demo. This demonstration captures a fingerprint in a database and verifies your fingerprint upon request. This is a demo only and should be used as a blueprint for creating your ID verification applications.

Download the demo at:

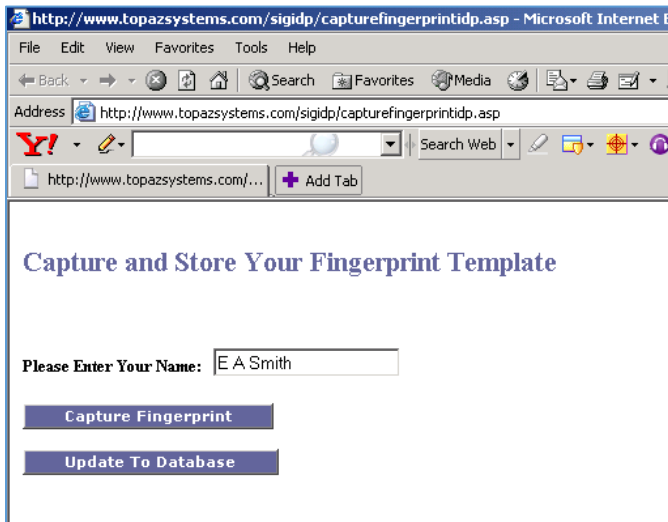
www.topazsystems.com/software/download/web/sigidp_asp_demo.zip

Begin by opening “sigidpstart.htm” It will be located in the .zip file you downloaded from the Topaz website. You will see the screen below.

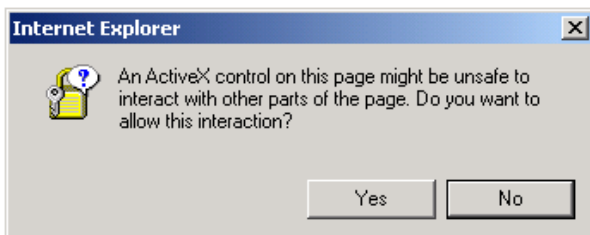


To create a new entry in the database, press “New Fingerprint Template”.

This will bring up another page. Please enter your name and press “Capture Fingerprint”.

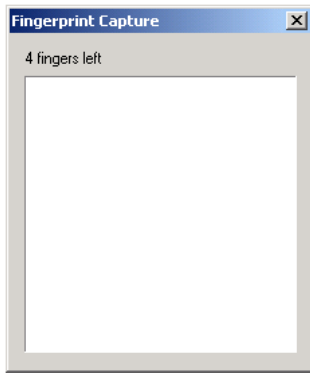


If at any time while running this demo you see the prompt below, click yes.

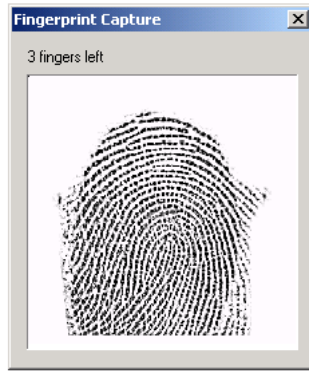


A fingerprint ID interface will appear. Place your finger against the pad to capture your fingerprint. To get an accurate scan of your finger, the procedure needs to be repeated four times. Please Note: it is important that the swirl of your finger is fairly centered on the ID capture device. Also be sure to use the same finger every scan.

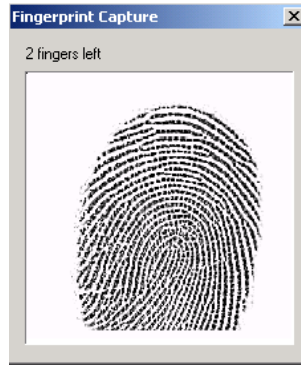
First Time:



Second Time:



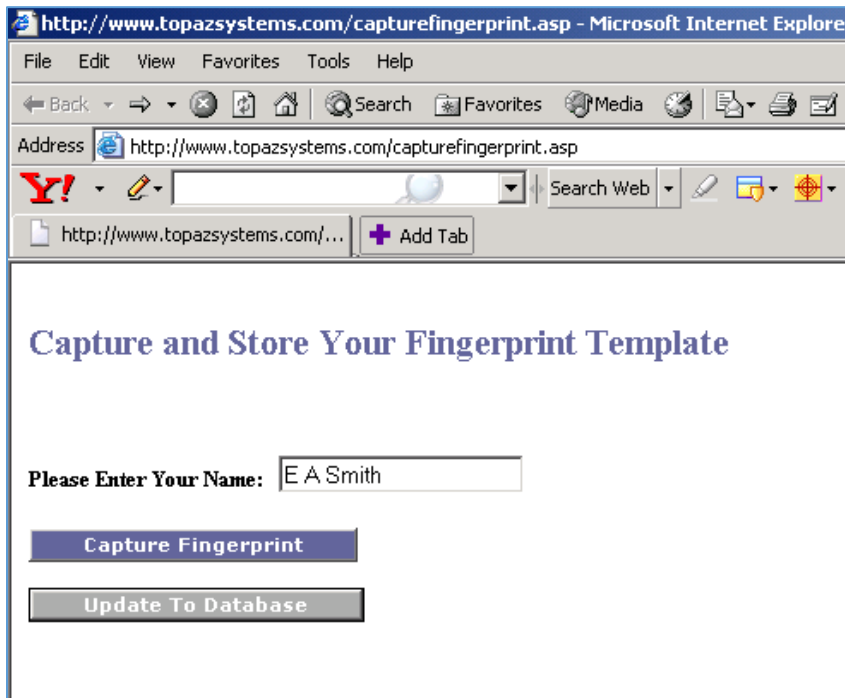
Third Time:



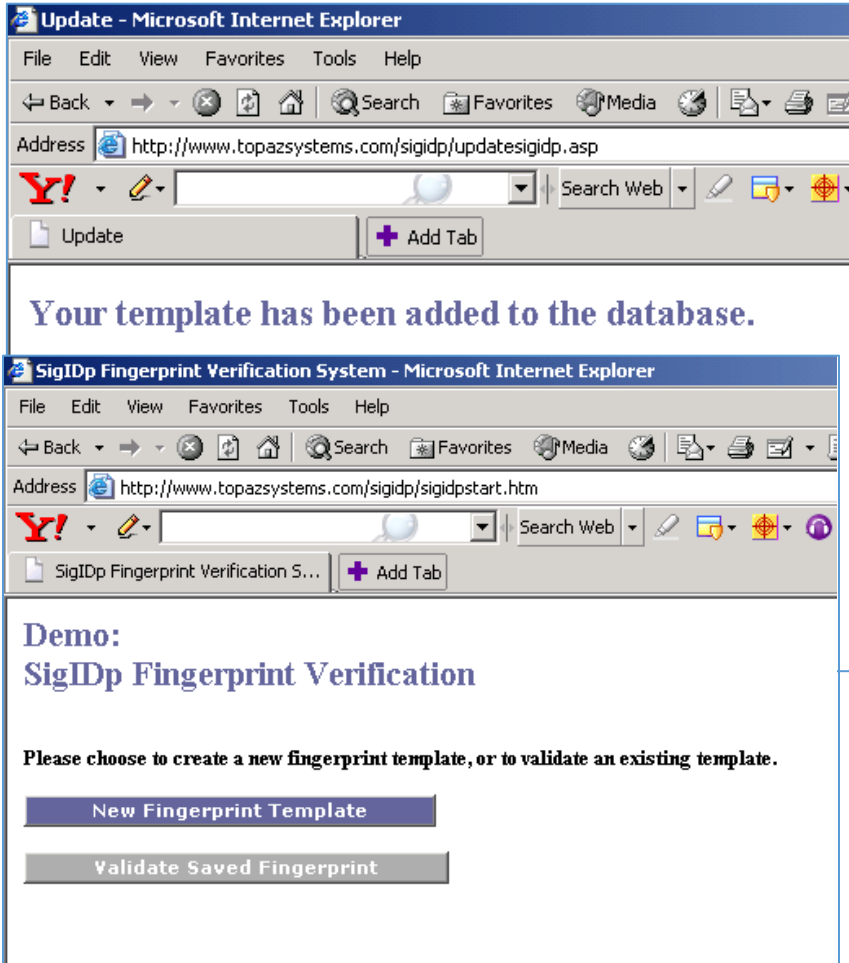
Final Time:



When the program has sufficient data to create an entry, you will see the screen below. If you didn't have a chance to capture the fingerprint 4 times, you should try the process again. Otherwise, click "Update Database" to save your ID to file.



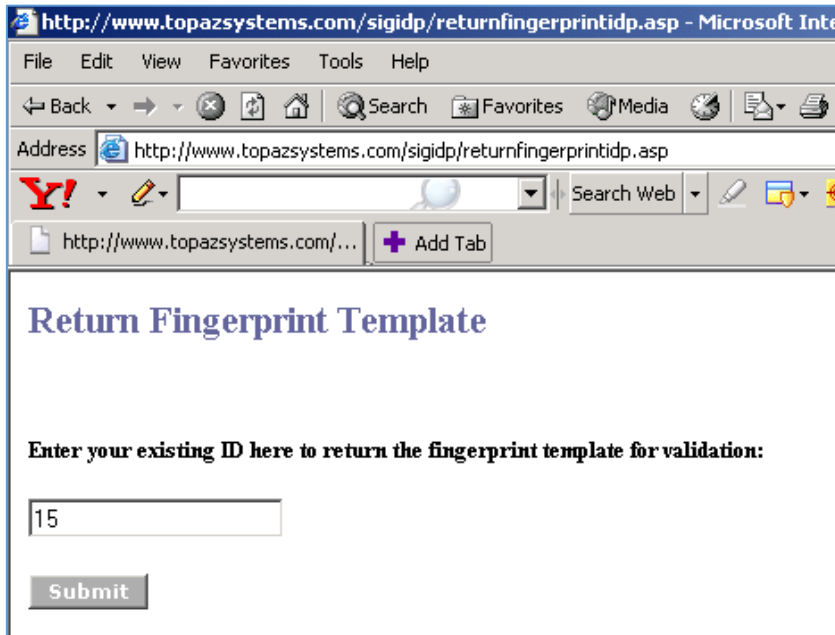
You will now receive a number to correspond to your identity. In order to later validate your identity, you will need to either memorize or write your assigned number down. Once you know your number, click "Return to SigID Main" to validate your identity.



This will navigate you back to the main menu. You have

already created a template, so now we want to instead validate the ID you just saved. Click on "Validate Saved Fingerprint".

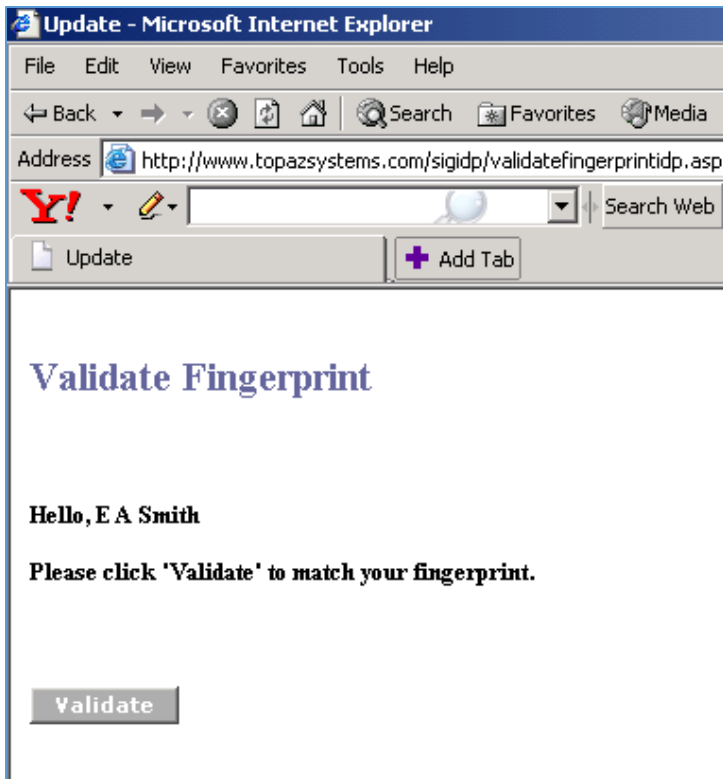
Type in the ID number you received after creating your fingerprint template in the box.



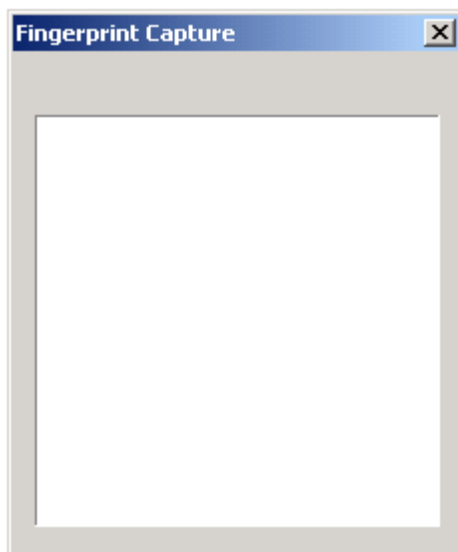
Return Fingerprint Template

Enter your existing ID here to return the fingerprint template for validation:

After you enter your identification number, your name will be displayed, and you will be prompted to validate your fingerprint ID. Visually verify that the name is correct, and click “Validate”.



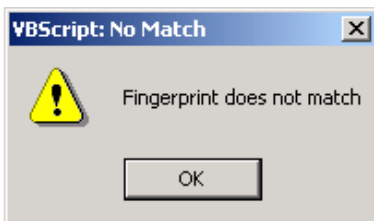
You will see the screen below. Press the same finger you used to enroll against the ID scanner to validate your identity.



If the scanned fingerprint matches the one saved in the database, you will receive this message.



If however they do not match, you will receive a message stating that they do not. If you think you received this message in error, try to validate your ID again, and be sure to center your finger on the fingerprint scanner.



The Code

First we will look at the code behind “**SigIDpStart.htm**”. When you click on the button “New Fingerprint Template”, function onNew takes you to capturefingerprintidp.asp.

```
function OnNew() {
    location.replace("http://www.topazsystems.com/sigidp/capturefingerprintidp.asp");
}
```

When you click on the button “Validate Saved Fingerprint”, function onRetrieve takes you to returnfingerprintidp.asp.

```
function OnRetrieve() {
    location.replace("http://www.topazsystems.com/sigidp/returnfingerprintidp.asp");
}
```

The code below creates the form you see, including buttons “New Fingerprint Template” and the “Validate Saved Fingerprint” button.

```
<FORM NAME="NoName">
<DIV STYLE="position:absolute; top:60px; left:10px;">
<br><br><b>Please choose to create a new fingerprint template, or to validate an existing template.
<BR><BR>
```


Sub OnDone first checks to make sure that the user entered something in the name field. If not, a “MsgBox” prompts the user to do so. Then, it checks to see if a fingerprint template has been captured. If not, the user is prompted to create a template. If they have entered their name and enrolled their fingerprint, then the form will be submitted.

```

Sub OnDone
If document.FORM1.NameField.value= "" Then
    MsgBox "Please enter a name before continuing!"
Exit Sub
End If
If document.FORM1.SigIDpField.value= "" Then
    MsgBox "Please capture a fingerprint before continuing!"
Exit Sub
Else
    document.FORM1.Submit
End If
end sub
/-->

```

Now, we will go through the ASP for “**updatesigidp.asp**”, where the fingerprint is sent back to the server and placed into the database. This page is the page the user is directed to after capturefingerprintidp.asp. The code assembles all of the input data from the client page (this includes username and fingerprint template). This data is put into the SigIDp database. The name field from the client page is assigned to the strName variable. Additionally, the SigIDp field is assigned to the StrFingerprintIDp variable. Next, we open the SigIDp.mdb database and open the record set. We then add the strName and strFingerprint variables and update the database. There are three fields in the database: the name field, the fingerprint data, and an auto-number. This auto number is used as a primary key in the database and is provided to the user at the time of fingerprint capture. The user will later have to provide this number to get their fingerprint back for verification.

```

<%
Dim strName, strFingerprint
strName = Request.Form("NameField")
strFingerprint = Request.Form("SigIDpField")
'Response.Write strName
'Response.Write "<BR><BR>"
'Response.Write strFingerprint

Dim cnSignature
Dim rsSignature

Set cnSignature = CreateObject( "ADODB.Connection" )
Set rsSignature = CreateObject( "ADODB.Recordset" )

With cnSignature
    .Provider = "Microsoft.Jet.OLEDB.4.0"
    .ConnectionString = "Data Source =" & Server.MapPath ("/sigidp/sigidp.mdb")
    .Open
End With

```


If the user does not type in their ID number, they are kicked out and made to do so before they can continue; otherwise, the form is submitted and takes them to the `validatefingerprintidp.asp` page.

```

Sub OnDone

If document.FORM1.IDField.value= "" Then
    MsgBox "Please enter your ID before continuing!"
    Exit Sub
Else
    If IsNumeric(document.FORM1.IDField.value) = True Then
        document.FORM1.Submit
    Else
        MsgBox "ID must be numeric!"
        Exit Sub
    End If
End If
end sub
//-->

```

Finally we will view the ASP code for **“validatefingerprintidp.asp”**.

The code below creates an instance of SigIDp.

```

<OBJECT classid=clsid:F79E8EA0-A08E-44B0-BB42-58FDB7E4B49D height=50
    id=SigIDp1 name=SigIDp1
    style="HEIGHT: 1px; LEFT: 0px; TOP: 0px; WIDTH: 1px" width=1
    VIEWASTEXT>
    <PARAM NAME="_Version" VALUE="131095">
    <PARAM NAME="_ExtentX" VALUE="4842">
    <PARAM NAME="_ExtentY" VALUE="1323">
    <PARAM NAME="_StockProps" VALUE="0">
</OBJECT>

```

The code below creates 3 variables: `strName`, `strFingerprint`, and `valID`. These are used to extract the auto-number, the name, and the fingerprint template from the database. The appropriate record is pulled based upon the ID number provided by the user on the previous page.

```

<%
Dim valID, strName, strFingerprint
valID = Request.Form("IDField")
'Response.Write valID

Dim cnSignature
Dim rsSignature

Set cnSignature = CreateObject( "ADODB.Connection" )
Set rsSignature = CreateObject( "ADODB.Recordset" )

With cnSignature
    .Provider = "Microsoft.Jet.OLEDB.4.0"

```

```

        .ConnectionString = "Data Source =" & Server.MapPath ("/sigidp/sigidp.mdb")
        .Open
    End With

    rsSignature.CursorType = 1
    rsSignature.LockType = 3

    rsSignature.Open "SELECT * FROM Contracts WHERE ID=" & valID, cnSignature, 1, 3

    If rsSignature.RecordCount > 0 Then
        rsSignature.MoveFirst
        strName = rsSignature( "NameField" )
        strFingerprint = rsSignature( "FingerprintField" )
    End If

```

Three session variables are used to hold the ID, Name, and fingerprint template data.

```

        Session("strNameS")=strName
        Session("strFingerprintS")=strFingerprint
        Session("strIDS")=strID
    Else
        Response.Write "That ID does not exist!"
        Response.Redirect http://www.topazsystems.com/sigidp/returnfingerprintidp.asp
    End If
    <FONT COLOR=#666699'><h2>Validate Fingerprint</h2></FONT><BR><BR>
    <h4>Hello, <%=Session("strNameS")%>

    <BR><BR>
    Please click 'Validate' to match your fingerprint.</h4>
    <BR><BR>

```

Below, a few buttons are created to allow the user to perform the validation.

```

<FORM id=FORM1 name=FORM1>
<INPUT id=ValidateBtn name=ValidateBtn type=button value=Validate language
="VBScript" onclick=OnValidate style="BACKGROUND-COLOR: #666699; COLOR:
white; FONT: bold 8pt verdana" onmouseout="window.event.srcElement.style.background =
'#666699'" onmouseover="window.event.srcElement.style.background = '#AFAFAF'">
</FORM>

```

When you click “Validate”, first the software checks to ensure the ID device is plugged in to your computer.

```

Sub InitDevice
Dim intAns
intAns = SigIDp1.InitDevice
If intAns = 0 Then
    MsgBox "Initialization successful"
Elseif intAns = 1 Then
    MsgBox "Check to see if device is plugged in"
Elseif intAns = 2 Then
    MsgBox "Device is already initialized"
Else

```

```

        'unhandled exception
    End If
End Sub

Sub UninitDevice
    SigIDp1.CloseDevice
End Sub

Sub OnValidate

```

Then, to validate the ID, the current fingerprint string in the Text box is compared to the saved fingerprint identity using SigIDp1.ValidateFingerprintString. If the SigIDp1 function ValidateFingerprintString, which is set to equal intVal, equals 0, then the fingerprint matches the one stored to record. If it equals 1, then it does not match the fingerprint record. 2 denotes that there was an error in validating, and 3 denotes that the user cancelled validation.

```

.....
'Validate a captured SigIDpString (ASCII hex string) of fingerprint
.....
Dim intVal
intVal = SigIDp1.ValidateFingerprintString("<%=Session( "strFingerprintS" )%>")
'this example validates a new fingerprint against the
'current fingerprint string in the Text box
If intVal = 0 Then
    MsgBox "Fingerprint matches", vbOKOnly + vbInformation, "Match"
Elseif intVal = 1 Then
    MsgBox "Fingerprint does not match", vbOKOnly + vbExclamation, "No Match"
Elseif intVal = 2 Then
    MsgBox "Error loading file", vbOKOnly + vbExclamation, "Error Loading File"
Elseif intVal = 3 Then
    MsgBox "User canceled operation", vbOKOnly + vbExclamation, "User Canceled"
End If

end Sub
/-->

```