How-To Guide

SigPlus JavaScript Demo
Overview

This document is meant to be a basic how-to on how to implement SigPlus electronic signature capture software into an HTML application featuring JavaScript. The “DemoJavascript” pages (www.topazsystems.com/Software/download/web/html_javascript_demo.zip) are a demo, and though combined, they offer a certain level of functionality. It is meant to provide a framework for developers to implement SigPlus into their own custom web applications.

Begin by opening the “DemoJavascript” with a text editor, such as Notepad. Opening the file in Notepad will make the code visible and allow for easy copying and editing.

Within the “DemoJavascript” code, there are three necessary parts to ensure successful signature capture, storage, and transfer.

The first part of the code to be concerned with is the part of code that instantiates SigPlus. This section is contained within the <Object> tags as shown below.

```
<INPUT TYPE=HIDDEN NAME="sigdata">
<INPUT TYPE=BUTTON VALUE="Submit" onclick="setsigO" style="background-color: #AFAFAF; font: bold 8pt verdana" onmouseover="window.event.srcElement.style.background = '#AFAFAF';" onmouseout="window.event.srcElement.style.background = 'white';">
</DIV>
</FORM>

<OBJ?
<OBJECT classid=clsid:69A40DA3-4D12-11D0-86BD-0000C025864A height=75 id=SigPlu
style="HEIGHT: 180px; WIDTH: 320px; LEFT: 0px; TOP: 0px; VISIBLE=true; " VIEWA??
</OBJECT>

</DIV>
```

The beginning of this section creates the placement of what will be the signature window on the web page. The code in between the <Object> tags is the part of code that will instantiate the SigPlus object and the signature window size.

The second part of code to be concerned with is the section that builds the form. This code is between the <FORM> tags. Here the user will find much of the text that appears on the page, this can easily be changed to best fit the needs of the user.
Also, in this section there are the necessary buttons, such as sign, clear, and submit. These buttons are between the `<INPUT>` tags and are tied to SigPlus methods that dictate their actions. The buttons included are:

1. **Sign Button:**
   a. `SignBtn` name="SignBtn" type="button" value="Sign" language="VBScript" onclick="OnSign"

2. **Clear Button:**
   a. "ClearBtn" type="button" value="Clear" language="VBScript" onclick="OnClear"

3. **Submit Button:**
   a. `INPUT TYPE=BUTTON VALUE=" Submit " onClick="SetSig()"

Additionally, there is another very important piece of code contained in this section. It is essentially a hidden text box that stores the signature data.

`<INPUT TYPE=HIDDEN NAME="SigData">`
The last part of the code to be concerned with is the section that contains the commands connected to the actions of the buttons. These are Javascript methods and are named before they appear in the code pictured above. These methods are:

1. function OnClear() {
   a. SigPlus1.ClearTablet(); -This method clears the tablet

2. function OnCancel() {
   a. SigPlus1.TabletState = 0 –This method cancels the signing instance

3. function OnSign() {
   a. SigPlus1.TabletState = 1 –This method activates the tablet for signature capture

Additionally, there is a section of code that is responsible for making sure that the user inputs their first name in the appropriate field before signing. The code for this section can be found below.
Below is how the “DemoJavascript” looks if opened within a web browser and a brief description of its functionality.

This is how the form and the page look. There is a simple disclaimer that can be found in the form section and can be edited according to need. There is the field for the user’s first name that is also defined in the form section, the three buttons discussed earlier, and the signature window. To sign, simply enter a name into the appropriate field and sign on the Topaz signature capture tablet. The signature will appear in real time as the user is signing.
If the first name is not entered, or a signature is not captured, an error message will be generated when the user clicks the ‘Submit’.

Once the signature is successfully captured and the “Submit” button is clicked, the next page that will be opened is DemoJavascript2 (DJ2). This page contains the code and functionality from SigPlus that verifies the signatures and documents validity. Again, to examine and edit the code for DJ2, choose to open the file in a text editor, such as Notepad. The code for DJ2 can be broken up into three distinct parts. Much like the DemoJavascript page, there is a section of code that builds the form. This section contains the fields, buttons and the requisite coding needed, as well as the hidden fields that are contained in the first “DemoJavascript” page.

In JD2, the only button included is the “Done” button. The code for this button is as follows:

```
<input id="DoneBtn" name="DoneBtn" type="button" value="Display" onclick="LoadSig()"
```

The “Done” button will load the signature if the first name matches and the disclaimer information are all matching to the “DemoJavascript” page.

The form also includes the fields to enter the user’s name that are needed to load the signature. The code can be seen below:

```
<!-- DemoJavascript2 - Notepad -->
<br>
<form NAME="formdata">
  <input TYPE="hidden" NAME="signature">
  <input TYPE="hidden" NAME="txtvalue">
  <div STYLE="position:absolute; top:204px; left:10px;">
    <div>
      <input TYPE="text" size=17 name="Disclaimers">
    </div>
  </div>
  <div STYLE="position:absolute; top:252px; left:10px;">
    <div>Please re-enter your first name to display signature.</div>
  </div>
  <input TYPE="text" name="txtvalue2" &nbsp; &nbsp; &nbsp; &nbsp;">
  <input TYPE="hidden" NAME="DoneBtn" type="button" value="Display" onclick="LoadSig()" style="background-color: #666669; color: white; font: bold 8pt verdana" onmouseover="window.event.srcElement.style.background = "#666669" onmouseout="window.event.srcElement.style.background = "#FFAFAF"">  
</form>
```
The second part of code to examine is the Javascript commands. In this section, there are two functions that will grab the data passed through the GET method and redistribute the data for use on this page. This section also contains the code to load the signature into the signature box and specify its display characteristics. A sample of this code is seen below. It is important to note that this section must be contained within the proper tags to function properly.

```javascript
function replace(string, text, by) {
  // Replaces text with by in string
  var i = string.indexOf(text), newstr = '';
  if ((i !== -1)) {
    newstr = string.substring(0, i) + by;
    if (i + text.length < string.length)
      newstr += replace(string.substring(i + text.length, string.length), text, by);
  }
  return newstr;
}

function getParam(string, parm) {
  // returns value of parm from string
  var startPos = string.indexOf(parm + '=');
  if (startPos > -1) {
    startPos = startPos + parm.length + 1;
    var endPos = string.indexOf('&', startPos);
    if (endPos == -1)
      endPos = string.length;
    return unescape(string.substring(startPos, endPos));
  }
  return ''; 
}

var passed = replace(location.search.substring(1), '+', '');
document.forms[0].SigData.value = getParam(passed, 'SigData');
```

The last section of code for DJ2 deals with the appearance and construction of the web page itself. This code is found between the <Body> tags.

```html
<BODY>

<DIV STYLE="position:absolute; top:295px; left:300px;">
  <table border=1 cellpadding=0 height="150" width="300">
    <td>
      <OBJECT classid=clsid:69A0DA3-4D12-11D0-86B0-00060898841A height=75
        id=SigPlus1 style="HEIGHT: 125px; WIDTH: 325px; LEFT: 0px; TOP: 0px;"
        VIEWPORT="%">
        <PARAM NAME="_EXTENTX" VALUE="132095">
        <PARAM NAME="_EXTENTY" VALUE="4842">
        <PARAM NAME="_EXTENCY" VALUE="1323">
        <PARAM NAME="_STOCKPROP" VALUE="0">
      </OBJECT>
    </td>
  </table>
</DIV>

<h2>Verify Document and Display e-Signature</h2>
</Body>
</BODY>
```
Here is how the web page looks when opened after submitting a signature:

The disclaimer information is passed through to DJ2 and displayed in the appropriate field. If this text is changed, then the signature will not be displayed. To display the signature, not only does the disclaimer information need to match, but also the first name must match the one entered on the first page as well. If these do not match, an error window will be generated.
To display the signature, simply enter the first name and click on the “Display” button. This will then display the signature as shown below.

Using the easy-to-use code from these pages, all the benefits of encrypted, digital signatures can be implemented into a wide array of HTML- and Java-based applications.