

# Sectigo Code Signing Certificate – Integration Guide

1. Prepare Your “Empty” Webpages.....	1
2. Signup Page.....	1
3.1. Add the default CSS definitions.....	1
3.2. Add a <SCRIPT> tag for the Sectigo certEnroll.js code library.....	1
3.3. Add the required HTML form and <DIV> tag.....	1
3.4. Add the default JavaScript code.....	3
3.5. Customise the HTML, JavaScript and CSS.....	4
4. Signup Error Page.....	4
5. Signup Successful Page.....	4
6. Collection Page.....	4
7.1. Add the default CSS definitions.....	4
7.2. Add a <SCRIPT> tag for the Sectigo certInstall.js code library.....	4
7.3. Add the required HTML form and <DIV> tag.....	4
7.4. Add the default JavaScript code.....	5
7.5. Apply cosmetic changes.....	5
8. Publish Your Customised Webpages.....	5

## Version History

1.00	Original version.
1.01	Fix a hyperlink in section 2.

## 1. Prepare Your “Empty” Webpages

It is assumed that you will want to “host” your customised Code Signing Certificate signup/collection/installation webpages on your own website. However, if you prefer, it can be arranged for Sectigo to “host” these webpages.

You will need to create a separate .html file for each of the following purposes:

- Code Signing Certificate signup.
- Code Signing Certificate signup error (OPTIONAL).
- Code Signing Certificate signup successful (OPTIONAL).
- Code Signing Certificate collection/installation.

Prepare each of these “empty” webpages with your own style-sheets, headers, footers, etc, leaving space on the page for the Code Signing Certificate content.

## 2. Signup Page

A template webpage is available at [https://secure.sectigo.com/codeSigningCert/apply\\_template.html](https://secure.sectigo.com/codeSigningCert/apply_template.html). It contains all of the required HTML and JavaScript code described in this section.

**Note:** To ensure compatibility with Windows Vista, we recommend that you serve your Signup Page to your customers over HTTPS.

To construct your Signup Page, create a basic HTML file in your favourite webpage editor, then...

### 3.1. Add the default CSS definitions

We recommend that you copy the <STYLE> section from the template webpage mentioned above, then modify it later to suit your needs.

### 3.2. Add a <SCRIPT> tag for the Sectigo certEnroll.js code library

Sectigo's certEnroll.js code library handles the Private Key Generation and the creation of the Certificate Signing Request (CSR). It provides cross-browser support for Windows (CertEnroll for Vista upwards, XEnroll for older Windows versions) and any browser that supports the <KEYGEN> tag (e.g. Mozilla-based browsers).

Add the following line somewhere in the <BODY> section of your webpage:

```
<SCRIPT type="text/javascript" language="JavaScript" src="https://secure.sectigo.com/signup/certEnroll.js"></SCRIPT>
```

### 3.3. Add the required HTML form and <DIV> tag

At the appropriate place in the <BODY> section of the webpage, add the following HTML:

```
<FORM name="form1" method="post" id="certEnroll_form"
  action="https://secure.sectigo.com/products/!PlaceOrder"
  onSubmit="return submitForm(this)">
<TABLE>
<INPUT type="hidden" name="ap" value="xxxxx">
<INPUT type="hidden" name="reseller" value="Y">
<INPUT type="hidden" name="errorURL" value="https://secure.sectigo.com/codeSigningCert/applyError.html">
<INPUT type="hidden" name="successURL" value="https://secure.sectigo.com/codeSigningCert/applySuccess.html">
<TR id="certEnroll_field">
  <TD id="certEnroll_header" colspan="2">
    <B>Apply for Sectigo Code Signing Certificate</B>: Template Page
  </TD>
</TR>
<TR id="certEnroll_field"><TD colspan="2">&nbsp;</TD></TR>
```

```

<TR id="certEnroll_field">
  <TD id="certEnroll_header" colspan="2">Organization Details</TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Organization Name</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="organizationName" maxLength="64" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Organization Unit Name (optional)</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="organizationalUnitName" maxLength="64" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">P. O. Box (optional)</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="postOfficeBox" maxLength="40" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Street Address 1</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="streetAddress1" maxLength="128" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Street Address 2 (optional)</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="streetAddress2" maxLength="128" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Street Address 3 (optional)</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="streetAddress3" maxLength="128" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Locality Name</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="localityName" maxLength="128" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">State or Province Name</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="stateOrProvinceName" maxLength="128" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Postal Code</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="postalCode" maxLength="40" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Country Name</TD>
  <TD id="certEnroll_fieldValue">
    <SELECT name="countryName" size="1" id="certEnroll_select"></SELECT>
  </TD>
</TR>
<TR id="certEnroll_field"><TD colspan="2">&nbsp;&nbsp;&nbsp;</TD></TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_header" colspan="2">Admin Contact Details</TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">First Name</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="forename" maxLength="64" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Last Name</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="surname" maxLength="64" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Email Address</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="emailAddress" maxLength="255" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Username</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="loginName" maxLength="64" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Password</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="password" name="loginPassword" maxLength="255" size="32">
  </TD>
</TR>
<TR id="certEnroll_field"><TD colspan="2">&nbsp;&nbsp;&nbsp;</TD></TR>

```

```

<TR id="certEnroll_field">
  <TD id="certEnroll_header" colspan="2">Certificate Details</TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Contact Email Address (optional)</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="text" name="l_contactEmailAddress" maxLength="255" size="32">
  </TD>
</TR>
<TR id="certEnroll_field">
  <TD id="certEnroll_fieldName">Validity Period</TD>
  <TD id="certEnroll_fieldValue">
    <INPUT type="radio" name="l_PPP" value="1511">1 year
    <BR><INPUT type="radio" name="l_PPP" value="1512" checked="">2 years
    <BR><INPUT type="radio" name="l_PPP" value="1509">3 years
    <BR><INPUT type="radio" name="l_PPP" value="1534">4 years
    <BR><INPUT type="radio" name="l_PPP" value="1508">5 years
  </TD>
</TR>
<TR id="certEnroll_field"><TD colspan="2">&nbsp;</TD></TR>
<TR id="certEnroll_field">
  <TD colspan=2>
    <DIV id="certEnroll_advancedOptions" align="left"></DIV>
  </TD>
</TR>
<TR id="certEnroll_field"><TD colspan="2">&nbsp;</TD></TR>
<TR id="certEnroll_field">
  <TD colspan=2 id="certEnroll_notice">
    <SCRIPT type="text/javascript" language="JavaScript">
      <!--
        if (g_environment == 0)
          document.write(
            "When you click the button below, your browser will generate a new private key."
          );
        else if (g_environment == 1)
          document.write(
            "When you click the button below, you will see one or more \"Potential \" +
            \"Scripting Violation\" popups. Click \"Yes\" to each one.<BR><BR>\" +
            \"If you are saving your Private Key to a .PVK file, you will also be asked \" +
            \"to enter a \"Private Key Password\". It is vital that you remember this \" +
            \"Password, because your Private Key cannot be used without it!\"
          );
        else if (g_environment == 2)
          document.write(
            "When you click the button below, you will see a \"Web Access Confirmation\"
            + \" popup, on which you will need to click \"Yes\" and then wait for a few\"
            + \" seconds.\"
          );
      </SCRIPT>
    </TD>
</TR>
<TR id="certEnroll_field"><TD colspan="2">&nbsp;</TD></TR>
<TR id="certEnroll_field">
  <TD colspan="2">
    <INPUT type="submit" value="Apply for Sectigo Code Signing Certificate">
  </TD>
</TR>
</TABLE>
</FORM>

```

**Note:** The “certEnroll\_advancedOptions” <DIV> element must be present. It is used by certEnroll.js to display browser-specific information on the webpage.

### 3.4. Add the default JavaScript code

Immediately before the </BODY> tag, add the following lines of JavaScript code:

```

<SCRIPT type="text/javascript" language="JavaScript"
  src="https://secure.sectigo.com/prices/countries.js"></SCRIPT>
<SCRIPT type="text/javascript" language="JavaScript">
  <!--
  g_defaultShowAdvancedOptions = true;
  g_advancedOptionsHideable = false;
  g_parameterNamePrefix = "l_";

  with (document.form1.countryName) {
    for (var l_countryNo = 0; l_countryNo < g_countries.length;
      l_countryNo += 2)
      options[length] = new Option(
        g_countries[l_countryNo + 1], g_countries[l_countryNo],
        g_countries[l_countryNo] == "US", g_countries[l_countryNo] == "US"
      );
  }

  function submitForm(
    v_form
  )
  {
    with (v_form) {
      if (!forename.value)
        alert("You must specify an Admin Forename!");
      else if (!surname.value)
        alert("You must specify an Admin Surname!");
      else if (!emailAddress.value)
        alert("You must specify an Admin Email Address!");
      else
        return true;
    }
  }

```

```
    }  
    return false;  
  }  
  //-->  
</SCRIPT>
```

### 3.5. Customise the HTML, JavaScript and CSS

#### 3.5.1. Specify the correct "ap=xxxxx" value

In the `<INPUT type="hidden" name="ap" value="xxxxx">` line, change `xxxxx` to the correct value, which you can find by logging into your Reseller account and examining your Ordering URLs.

#### 3.5.2. Specify an "Error URL"

The default "signup error" page is located at <https://secure.sectigo.com/codeSigningCert/applyError.html?errorCode=xx&errorItem=zz>. As mentioned before, you may choose to customise this page. If so, change the value of the `errorURL` form field to the absolute URL of your customised "signup error" page. Details on how to create a customised "signup error" page are provided in a later section.

#### 3.5.3. Specify a "Success URL"

The default "signup successful" page is located at <https://secure.sectigo.com/codeSigningCert/applySuccess.html>. As mentioned before, you may choose to customise this page. If so, change the value of the `successURL` form field to the absolute URL of your customised "signup successful" page. Details on how to create a customised "signup successful" page are provided in a later section.

#### 3.5.4. Specifying an alternative CA

If you have an agreement with Sectigo for an alternative CA to be used to issue Code Signing Certificates, you will need to add the following additional parameter to the HTML form:

```
<INPUT type="hidden" name="caCertificateID" value="nn">
```

Sectigo will inform you of the value(s) that you may use for *nn*.

#### 3.5.5. Apply cosmetic changes

You are welcome to make whatever changes you require to customise the look of the webpage. Be careful when modifying the default CSS though, since some of the styles it defines are used in HTML snippets that are dynamically generated by `certEnroll.js` (see section 3.2).

## 4. Signup Error Page

If you have chosen to customise the "signup error" page by specifying a value for the `errorURL` (see section 3.5.2), you will need to be aware that when Sectigo redirects the client's browser to this page, the following parameters are passed in the query string:

<code>errorCode</code>	A negative integer (see table below for possible values)
<code>errorItem</code> (OPTIONAL)	The name of the problematic form field (if applicable for the error)

Here is a list of the possible values for `errorCode`:

<code>errorCode</code>	
-1	Request was not made over https!
-3	The <code>errorItem</code> argument is missing!
-4	The value of the <code>errorItem</code> argument is invalid!
-14	An unknown error occurred!
-16	Permission denied!

The JavaScript code in the default "signup error" page demonstrates how to parse these parameters. You are welcome to copy-and-paste this JavaScript, changing it to suit your requirements.

## 5. Signup Successful Page

If you have chosen to customise the "signup successful" page by specifying a value for the `successURL` (see section 3.5.3), note that there are no special instructions required to create this customised page.

## 6. Collection Page

A template webpage is available at [https://secure.sectigo.com/codeSigningCert/collect\\_template.html](https://secure.sectigo.com/codeSigningCert/collect_template.html). It contains all of the required HTML and JavaScript code described in this section.

**Note:** To ensure compatibility with Windows Vista, we recommend that you serve your Collection Page to your customers over HTTPS.

To construct your Collection Page, create a basic HTML file in your favourite webpage editor, then...

### 7.1. Add the default CSS definitions

We recommend that you copy the `<STYLE>` section from the template webpage mentioned above, then modify it later to suit your needs.

### 7.2. Add a `<SCRIPT>` tag for the Sectigo `certInstall.js` code library

Sectigo's `certInstall.js` code library handles the Certificate Installation. Like `certEnroll.js`, it provides cross-browser support. Add the following line somewhere in the `<BODY>` section of your webpage:

```
<SCRIPT type="text/javascript" language="Javascript" src="https://secure.sectigo.com/signup/certInstall.js"></SCRIPT>
```

### 7.3. Add the required HTML form and `<DIV>` tag

At the appropriate place in the `<BODY>` of the webpage, add the following HTML:

```

<FORM name="collect_form" onSubmit="return submitForm(this)" id="certEnroll_form">
<TABLE>
  <TR id="certEnroll_field">
    <TD id="certEnroll_header" colspan="2">
      <B>Collect & Install Sectigo Code Signing Certificate</B>: Template Page
    </TD>
  </TR>
  <TR id="certEnroll_field"><TD colspan="2">&nbsp;</TD></TR>
  <TR id="certEnroll_field">
    <TD id="certEnroll_header" colspan="2">Collection Details</TD>
  </TR>
  <TR id="certEnroll_field">
    <TD id="certEnroll_fieldName">Collection Code</TD>
    <TD><INPUT type="text" name="collectionCode" maxLength="16" size="16"></TD>
  </TR>
  <TR id="certEnroll_field"><TD colspan="2">&nbsp;</TD></TR>
  <TR id="certEnroll_field">
    <TD colspan="2">
      <INPUT type="submit" value="Collect Sectigo Code Signing Certificate">
    </TD>
  </TR>
</TABLE>
</FORM>
<DIV id="certInstall_status" align=left></DIV>

```

**Note:** The "certInstall\_status" <DIV> element must be present. It is used by certInstall.js to display feedback on whether or not the certificate has been installed correctly.

#### **7.4. Add the default JavaScript code**

Immediately before the </BODY> tag, add the following lines of JavaScript code:

```

<SCRIPT type="text/javascript" language="JavaScript">
<!--
function submitForm(
  v_form
)
{
  g_collectionCode = v_form.collectionCode.value;
  if (g_collectionCode == "") {
    alert("You must enter your Collection Code!");
    return false;
  }
  return true;
}

g_product = "8";
certInstall_tryToInstallCertificate(document.collect_form.collectionCode);
//-->
</SCRIPT>

```

#### **7.5. Apply cosmetic changes**

You are welcome to make whatever changes you require to customise the look of the webpage.

### **8. Publish Your Customised Webpages**

When you have completed the above steps, you will need to publish your customised webpages on your website. You will also need to provide the URL of the Signup page to your customers, and provide the URL of your Collection page to Sectigo (because Sectigo will need to quote this URL in certificate collection emails sent to the customer on your behalf).