IntegriSign for Adobe Acrobat

Contents

1. Introduction 2
2. Using IntegriSign in Adobe Acrobat 2
    2.1 Creating a Signature in Adobe Acrobat 8.0 2
    2.2 Selection of certificate for signing in Acrobat 9.0 and later 5
    2.3 Creating a Signature in Adobe Acrobat 9.0 6
    2.4 Creating a Signature in Adobe Acrobat 10.0 10
    2.5 Signing in Adobe Reader 10.0 14
    2.6 Creating a Signature in Adobe Acrobat 11.0 15
    2.7 Signing in Adobe Reader 11 20
    2.8 Creating a Signature in Adobe Acrobat DC 20
    2.9 Signing in Adobe Reader DC 27
    2.10 Document Verification 28
    2.11 Opening an signed document 28
    2.12 Setting Affirmation Text to ePad LCD devices 28
    2.13 Troubleshooting 29

1. Introduction

An IntegriSign plug-in allows you to create a document and sign it electronically with your handwritten signature using an ePad device. The plug-in facilitates:

1. **Signature Capture** - The signature trace is captured and stored on the electronic document in a signature object.

2. **Content Hashing** - The signature object is bound to the contents of the document such that any alteration of the document after signing it would render the signature invalid.

3. **Document Verification** – The document can be verified to ensure its integrity (i.e., confirming that it has not been tampered) after the act of signing.

2. Using IntegriSign in Adobe Acrobat

The IntegriSign for Adobe Acrobat plug-in allows you to create a document and sign it electronically with your handwritten signature using an ePad device. IntegriSign leverages the Acrobat digital signature plug-in framework to facilitate the standard features like Signature Capture, and Content Hashing.

2.1 Creating a Signature in Adobe Acrobat 8.0

Signing in Adobe Acrobat Professional 8.0 can be accomplished in the following ways.

Method I

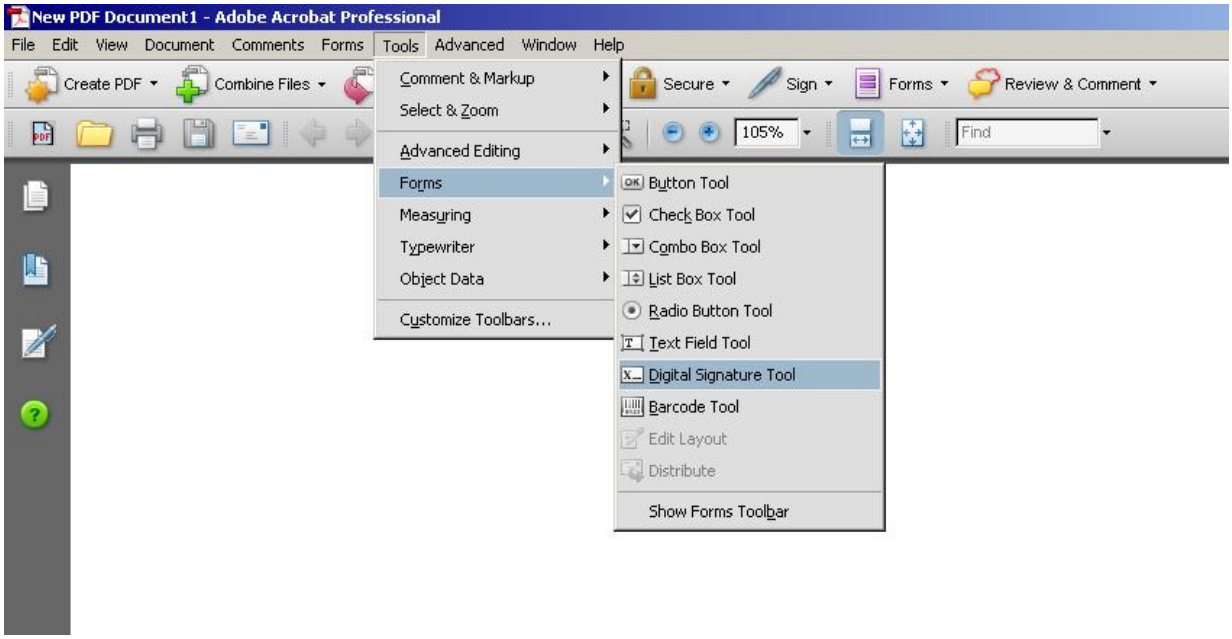
1. Open the PDF document to be signed.
2. Click on the Sign tool

.
3. Click 'Place Signature' and then using mouse, click and drag to draw the area where you would like the signature to appear on your document.
4. Start signing in the displayed signature window.

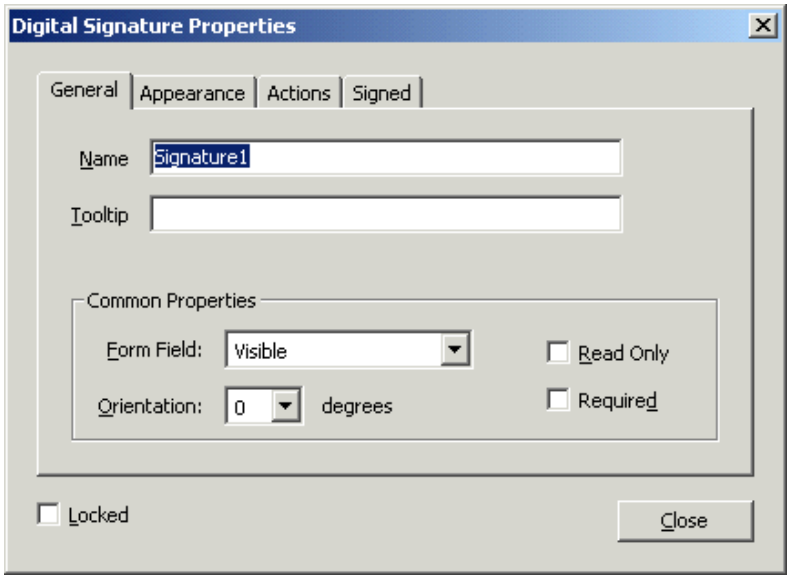
Method II

Placing an Empty Signature field

1. Open the PDF document to be signed.
2. Click on the menu "Tools -> Forms -> Digital Signature Tool" as shown below.



3. Using mouse, click and drag to draw the area where you would like the signature to appear on your document.
4. The Digital Signature Properties window is now displayed. Enter an

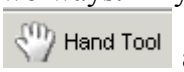


appropriate name in the General tab. You can set display details like font, text color, Borders and Colors etc. in the Appearance tab. Click 'Close'.

Note: *Adobe Acrobat 8 Standard does not support placing of empty signature fields in a PDF.*

Method III

Signing an Empty Signature field

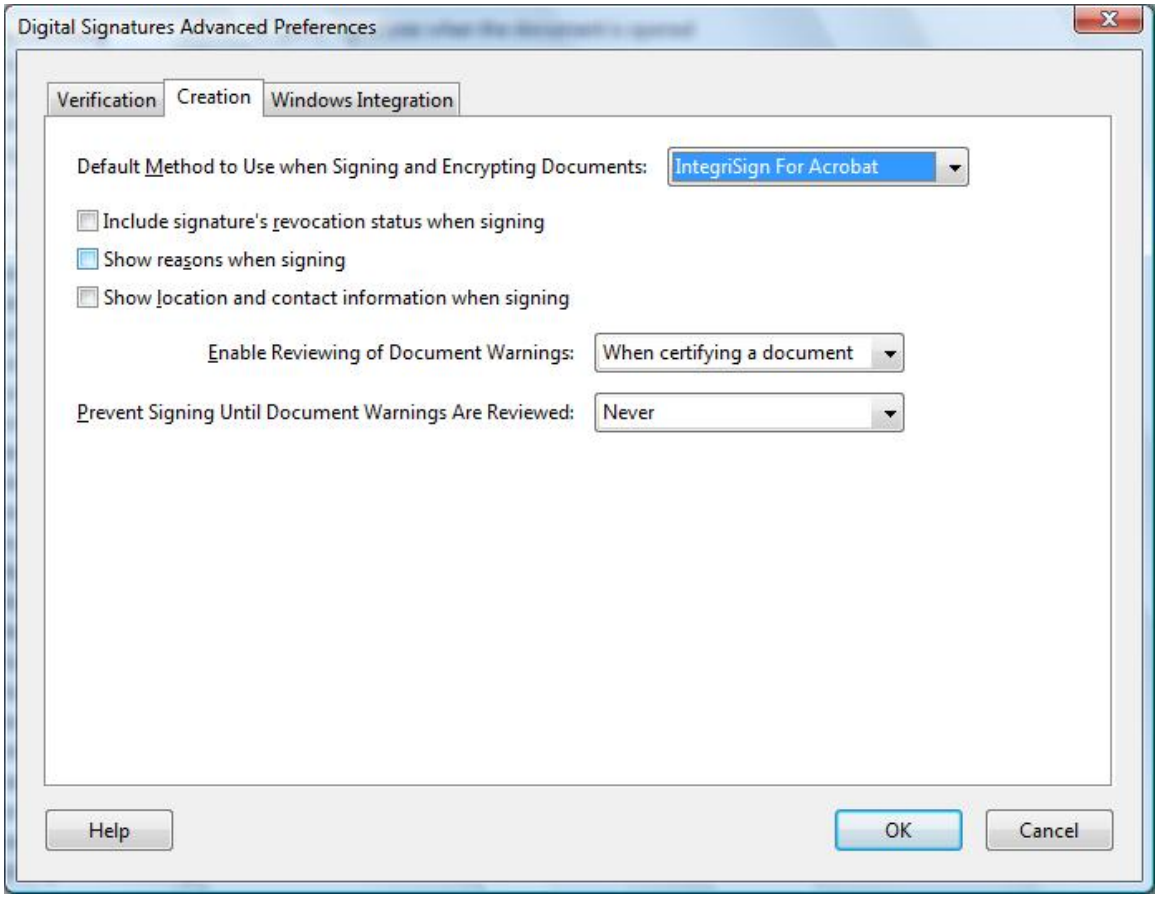
Signing an Empty signature field can be accomplished in two ways. If you want to sign a particular signature field, click on the Hand tool 

and then on the created sign field. One can also sign an empty signature field using "Sign Document" option under the sign tool

. When this method is used, the signature fields get signed in the order they have been inserted in the document. That is, the first available unsigned signature field gets signed.

Note:

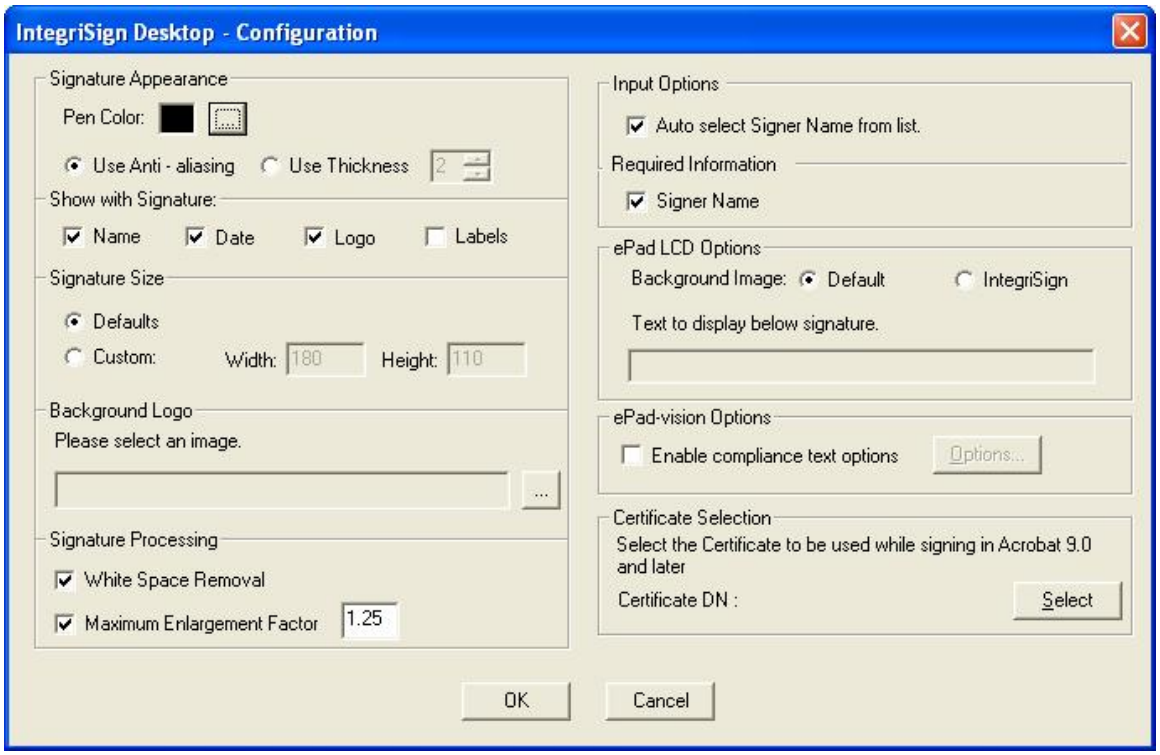
In case IntegriSign signature capture window is not displayed automatically in 8.0, click 'Preferences' in the Edit menu. Select 'Security'. On the right-hand side select the button "Advanced Preferences". In the displayed window, select "Creation" tab. Set the "Default Method to Use when Signing and Encrypting Documents" to "IntegriSign for Acrobat" as shown in the image below. Click on OK. In case IntegriSign Desktop software is not installed properly you may not see this option.
When IntegriSign Desktop is properly installed, in the "Signing Method" drop down list, you will also see "IntegriSign for Acrobat 9.0 and later" option. The purpose of this handler is to validate signatures signed using Acrobat 9.0 and later. For signing in Acrobat/Reader 8.0, use only "IntegriSign for Acrobat".



In the "Verification" tab, make sure that the option "Use the document-specified method. Prompt if it is not available." is checked. This is the default option, if it was not manually modified by the user.

2.2 Selection of certificate for signing in Acrobat 9.0 and later

A digital certificate is required for signing in Acrobat 9.0 and later. Certificate Selection option in Desktop Configuration (which can be accessed from Start→Programs→IntegriSign Desktop → Desktop→Desktop Configuration) lets you specify the Certificate that needs to be used. The certificate can be a self-signed or from a trusted CA (i.e. Certification Authority). Screenshot of the Desktop Configuration window is shown below.



2.3 Creating a Signature in Adobe Acrobat 9.0

Signing in Adobe Acrobat Professional 9.0 can be accomplished in the following ways.

Method I

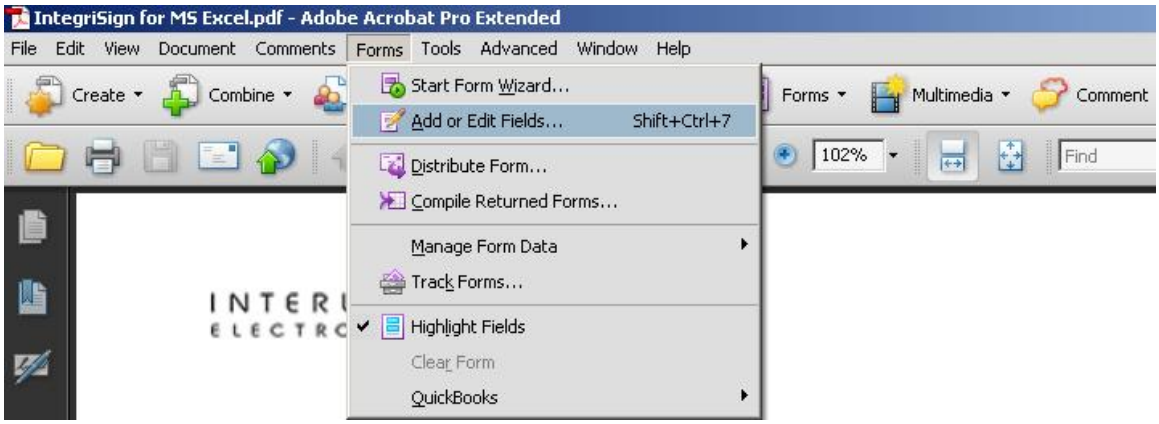
1. Open the PDF document to be signed.
2. Click on the Sign tool

.
3. Click 'Place Signature' and then using mouse, click and drag to draw the area where you would like the signature to appear on your document.
4. Start signing in the displayed signature window.

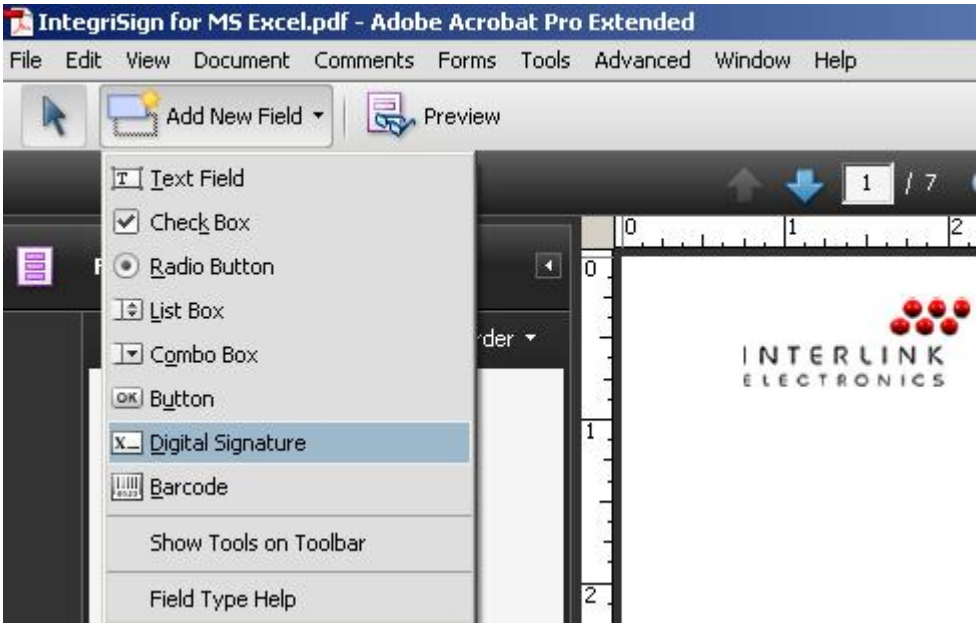
Method II

Placing an Empty Signature field

1. Open the PDF document to be signed.
2. Click on the menu "Forms -> Add or Edit Fields" as shown below.

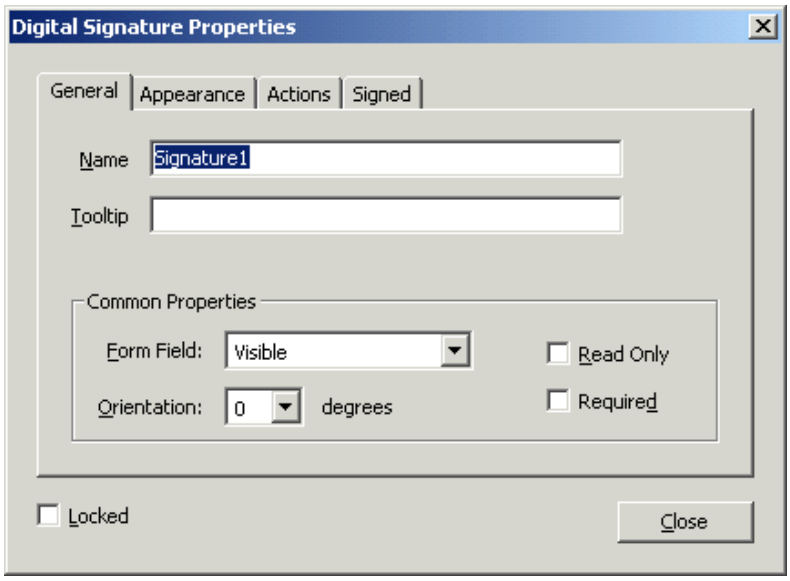


3. If the opened PDF does not contain any prior form fields, one will receive a message saying "Currently there are no form fields in this PDF. Do you want Acrobat to detect form fields for you?" Click on "Yes" button. One will receive a message that "No new form field annotations were detected" and design mode of the PDF gets enabled. If the PDF contains form fields previously, one will not receive any messages and are directly taken to the design mode.
4. In the design mode, either click on "Add New Field" button in the toolbar or click on the menu "Forms -> Form Tools" and then select "Digital Signature".



5. Using mouse, click and drag to draw the area where you would like the signature to appear on your document. Right click on the newly inserted signature field and then select "Properties…".

6. The Digital Signature Properties window is now displayed. Enter an



appropriate name in the General tab. You can set display details like font, text color, Borders and Colors etc. in the Appearance tab. Click 'Close'.

Method III

Signing an Empty Signature field

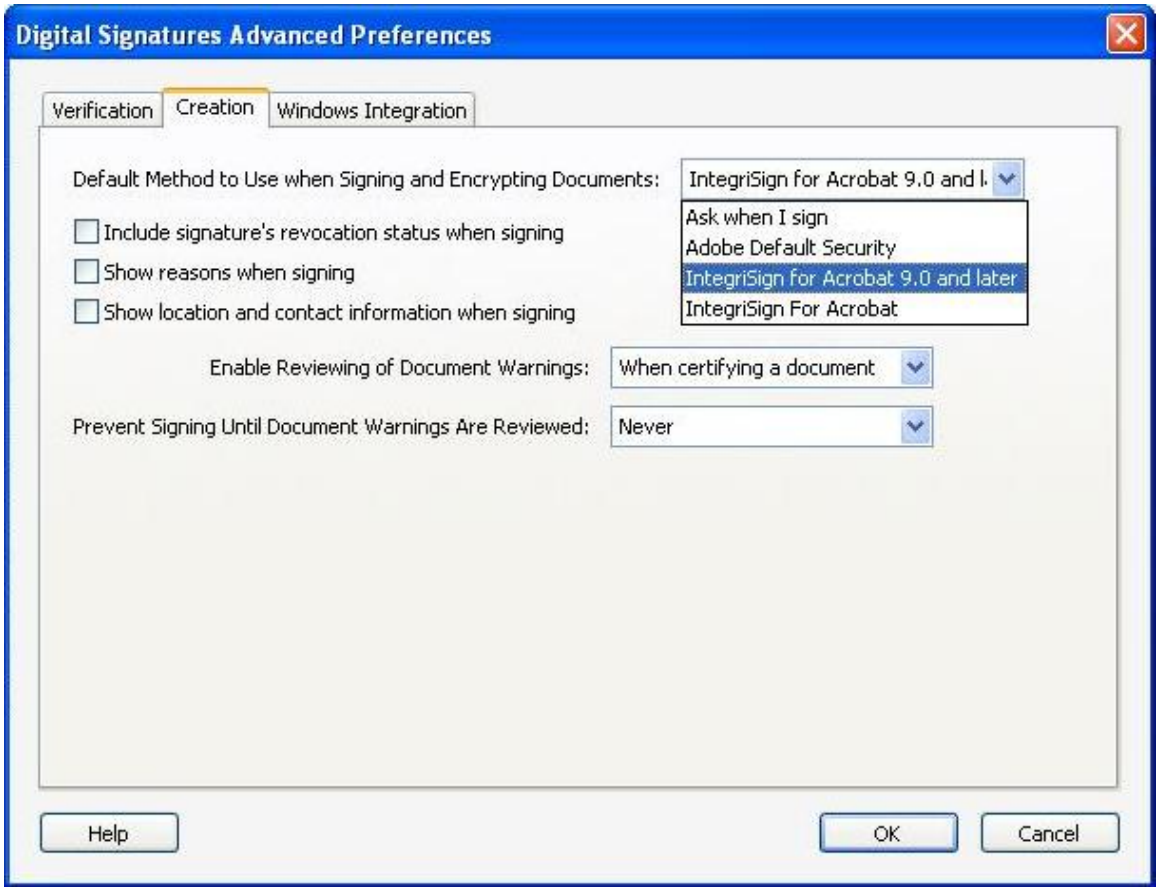
Signing an Empty signature field can be accomplished in two ways. If you want to sign a particular signature field, click on the Hand tool

and then on the created sign field. One can also sign an empty signature field using "Sign Document" option under the sign tool

. When this method is used, the signature fields get signed in the order they have been inserted in the document. That is, the first available unsigned signature field gets signed.

Note:

In case IntegriSign signature capture window is not displayed automatically in 9.0, click 'Preferences' in the Edit menu. Select 'Security'. On the right-hand side select the button "Advanced Preferences". In the displayed window, select "Creation" tab. Set the "Default Method to Use when Signing and Encrypting Documents" to "IntegriSign for Acrobat 9.0 and later" as shown in the image below. Click on OK. In case IntegriSign Desktop software is not installed properly you may not see this option.



When IntegriSign Desktop is properly installed, in the "Default Method to Use when Signing and Encrypting Documents" drop down list, you will also see "IntegriSign for Acrobat" option. The purpose of this handler is to validate signatures signed using earlier versions of Acrobat. For signing in Acrobat/Reader 9.0, use only "IntegriSign for Acrobat 9.0 and later".

In the "Verification" tab, make sure that the option "Use the document-specified method. Prompt if it is not available." is checked. This is the default option, if it was not manually modified by the user.

In Acrobat 9.0, Signatures signed using IntegriSign can be verified using Acrobat's standard handler (i.e. "Adobe Default Security") in the absence of any IntegriSign software.

2.4 Creating a Signature in Adobe Acrobat 10.0

Signing in Adobe Acrobat Professional 10.0 can be accomplished in the following ways.

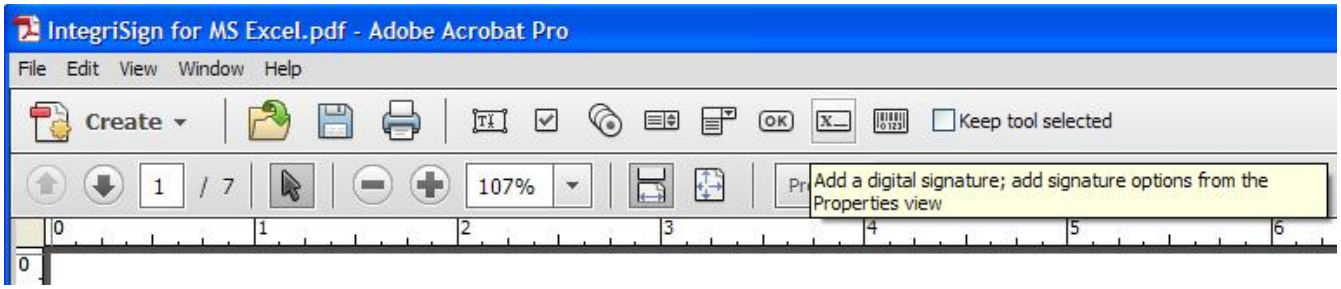
Method I

1. Open the PDF document to be signed.
2. Click on the "Tools" button and then click on "Sign & Certify" pane item in the Tools task pane.
3. Click 'Place Signature' or 'Sign Document' and then using mouse, click and drag to draw the area where you would like the signature to appear on your document.
4. Start signing in the displayed signature window.

Method II

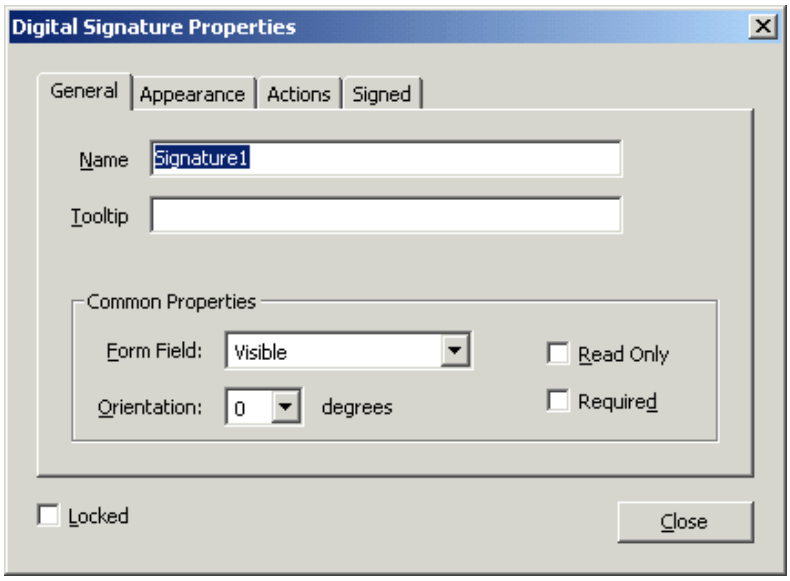
Placing an Empty Signature field

1. Open the PDF document to be signed.
2. Click on "Edit" button under "Forms" menu in the Tools task pane.
3. If the opened PDF does not contain any prior form fields, one will receive a message saying "Currently there are no form fields in this PDF. Do you want Acrobat to detect form fields for you?" Click on "Yes" button. One will receive a message that "No new form field annotations were detected" and click on "OK" button. Design mode of the PDF gets enabled. If the PDF contains form fields previously, one will not receive any messages and are directly taken to the design mode.
4. In the design mode, either click on the "Forms -> Tasks -> Add New Field" and then select "Digital Signature" or click on "Add a digital signature" button in the toolbar as shown in the image below.



5. Using mouse, click and drag to draw the area where you would like the signature to appear on your document. Right click on the newly inserted signature field and then select "Properties…".

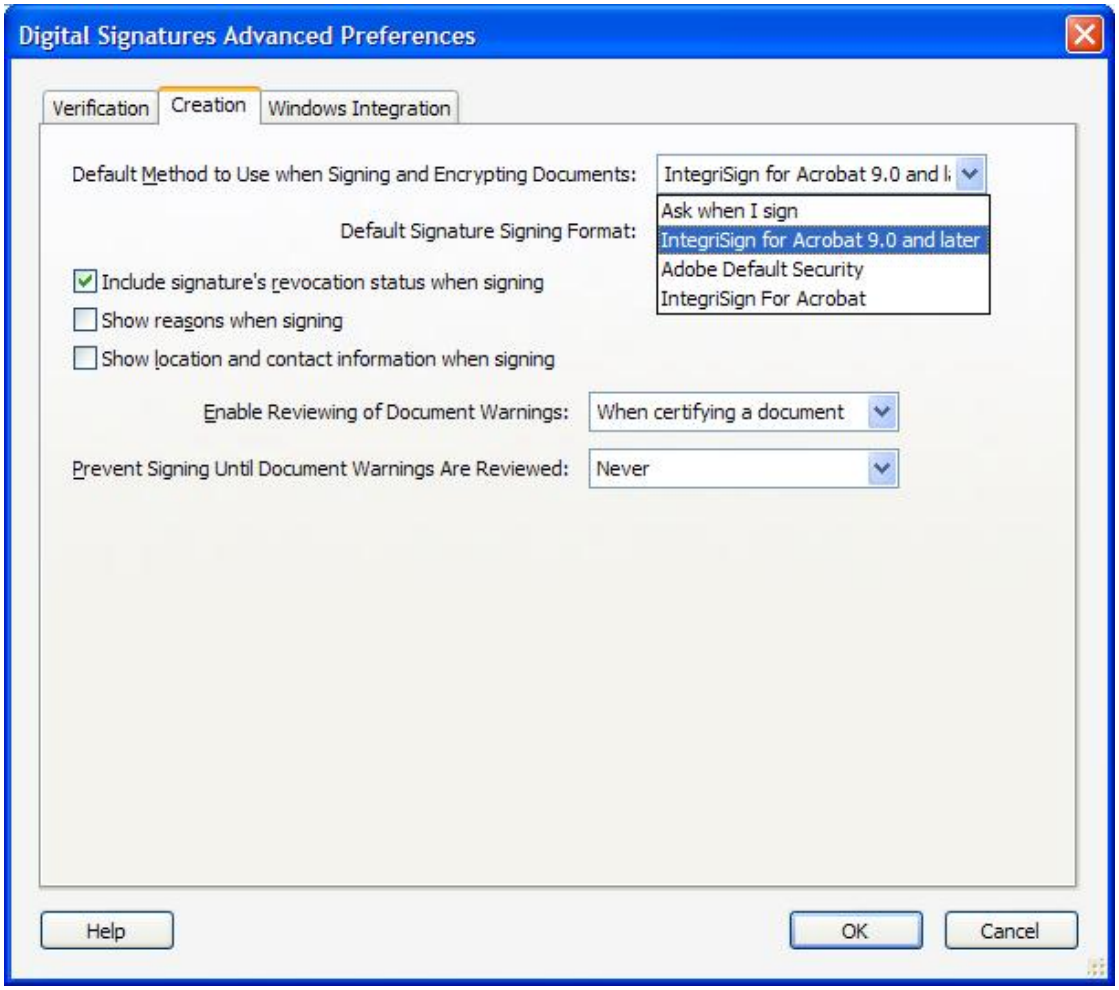
6. The Digital Signature Properties window is now displayed. Enter an



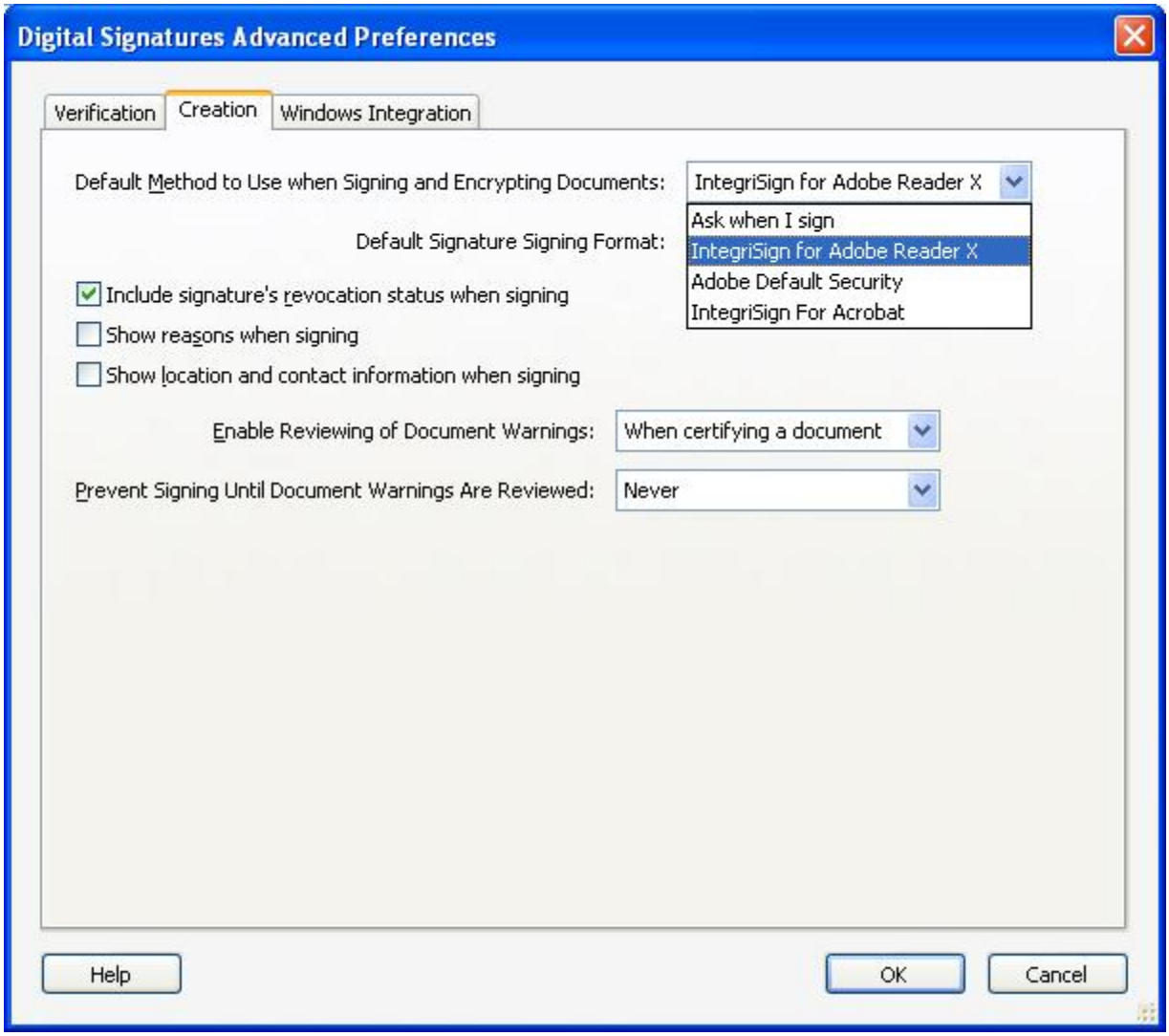
appropriate name in the General tab. You can set display details like font, text color, Borders and Colors etc. in the Appearance tab. Click 'Close'.

Note:

In case IntegriSign signature capture window is not displayed automatically in Acrobat/Reader 10.0, click 'Preferences' in the Edit menu. Select 'Security'. On the right-hand side select the button "Advanced Preferences". In the displayed window, select "Creation" tab. Set the "Default Method to Use when Signing and Encrypting Documents" to "IntegriSign for Acrobat 9.0 and later" if it is Acrobat 10.0 and "IntegriSign for Adobe Reader X" if it is Adobe Reader 10.0 as shown in the images below. Click on OK. In case IntegriSign Desktop software is not installed properly you may not see this option.


Digital Signatures Advanced Preferences
Verification
Creation
Windows Integration
Default Method to Use when Signing and Encrypting Documents:
IntegriSign for Acrobat 9.0 and l
Ask when I sign
IntegriSign for Acrobat 9.0 and later
Adobe Default Security
IntegriSign For Acrobat
Default Signature Signing Format:
Include signature's revocation status when signing
Show reasons when signing
Show location and contact information when signing
Enable Reviewing of Document Warnings:
When certifying a document
Prevent Signing Until Document Warnings Are Reviewed:
Never
Help
OK
Cancel

Acrobat 10.0



Adobe Reader 10.0

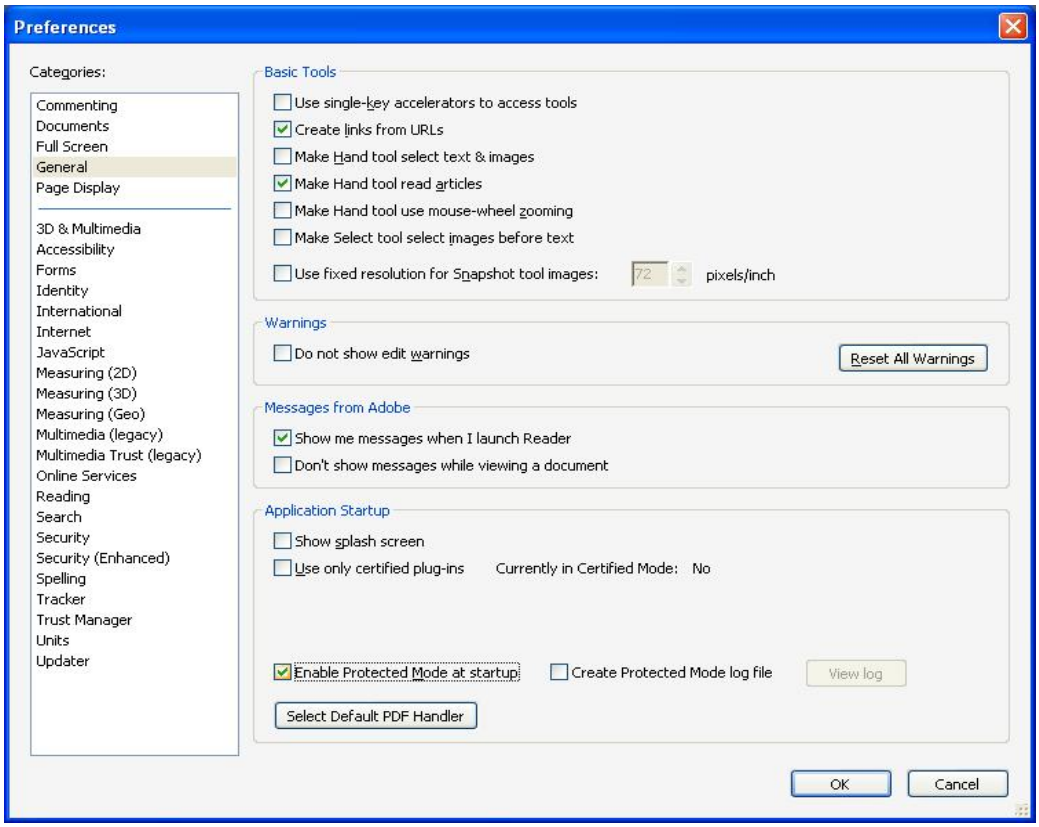
When IntegriSign Desktop is properly installed, in the "Default Method to Use when Signing and Encrypting Documents" drop down list, you will also see "IntegriSign for Acrobat" option. The purpose of this handler is to validate signatures signed using earlier versions of Acrobat. For signing in Acrobat/Reader 9.0 and Acrobat 10.0, use only "IntegriSign for Acrobat 9.0 and later". For signing in Reader 10.0, use the "IntegriSign for Adobe Reader X".

In the "Verification" tab, make sure that the option "Use the document-specified method. Prompt if it is not available." is checked. This is the default option, if it was not manually modified by the user.

In Acrobat/Reader 10.0, Signatures signed using IntegriSign can be verified using Acrobat's standard handler (i.e. "Adobe Default Security") in the absence of any IntegriSign software.

2.5 Signing in Adobe Reader 10.0

In Adobe Reader 10.0, by default, the "Enable Protected Mode at Startup" option under "Edit -> Preferences -> General -> Application Startup" would be in enabled mode. See the screenshot below.



When one tries to sign a signature when this setting is on, after clicking on the "OK" button in the Signature Capture window or on the signature capture device, one would be prompted with the "SaveAs" screen. Once the document is saved, the signature is applied to the document. If "Enable Protected Mode at startup" is disabled (i.e. unchecked), the signature gets applied to the PDF document without the "SaveAs" prompt and the document gets saved.

2.6 Creating a Signature in Adobe Acrobat 11.0

Signing in Adobe Acrobat Professional 11.0 can be accomplished in the following ways.

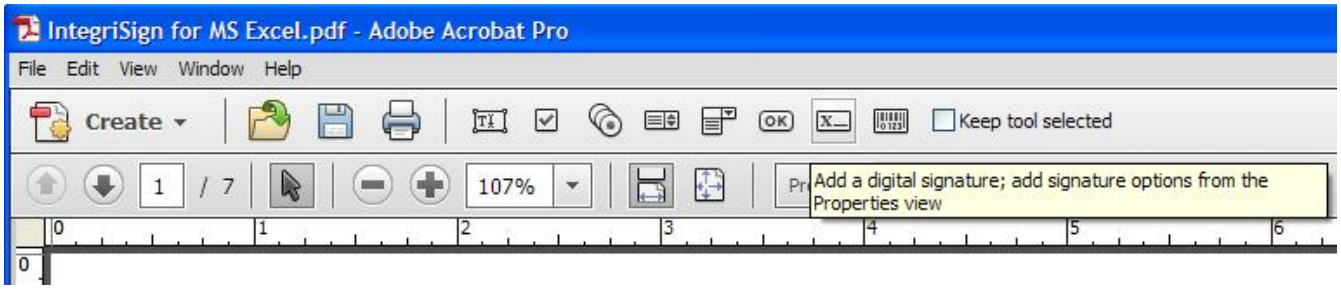
Method I

1. Open the PDF document to be signed.
2. Click on the "Tools" button and then click on "Sign & Certify" pane item in the Tools task pane.
3. Click 'Place Signature' or 'Sign Document' and then using mouse, click and drag to draw the area where you would like the signature to appear on your document.
4. Start signing in the displayed signature window.

Method II

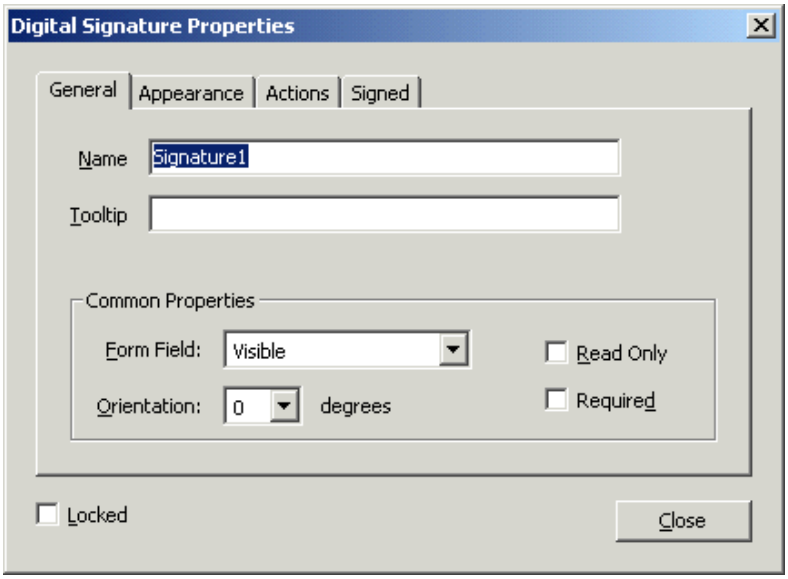
Placing an Empty Signature field

1. Open the PDF document to be signed.
2. Click on "Edit" button under "Forms" menu in the Tools task pane.
3. If the opened PDF does not contain any prior form fields, one will receive a message saying "Currently there are no form fields in this PDF. Do you want Acrobat to detect form fields for you?" Click on "Yes" button. One will receive a message that "No new form field annotations were detected" and click on "OK" button. Design mode of the PDF gets enabled. If the PDF contains form fields previously, one will not receive any messages and are directly taken to the design mode.
4. In the design mode, either click on the "Forms -> Tasks -> Add New Field" and then select "Digital Signature" or click on "Add a digital signature" button in the toolbar as shown in the image below.



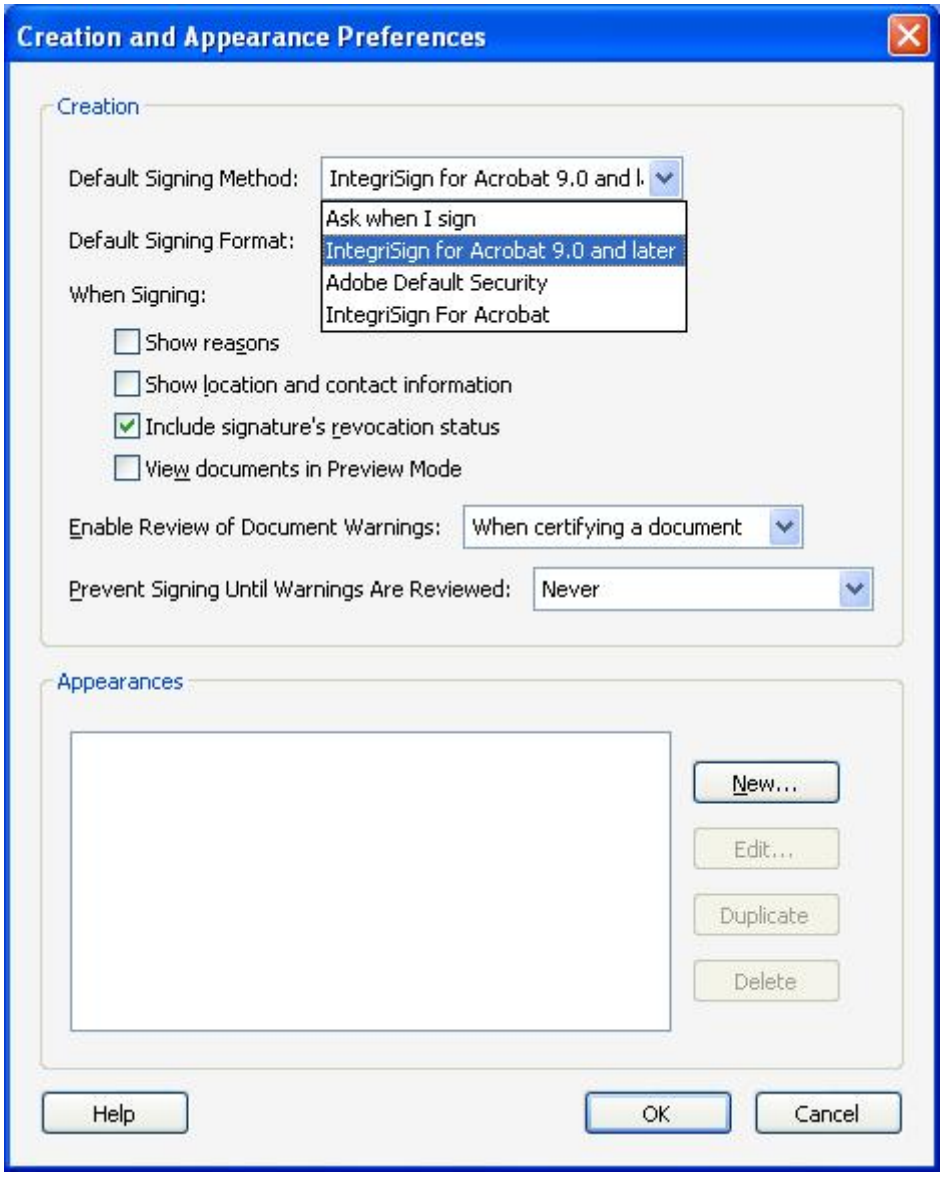
5. Using mouse, click and drag to draw the area where you would like the signature to appear on your document. Right click on the newly inserted signature field and then select "Properties…".

6. The Digital Signature Properties window is now displayed. Enter an appropriate name in the General tab. You can set display details like font, text color, Borders and Colors etc. in the Appearance tab. Click ‘Close’.

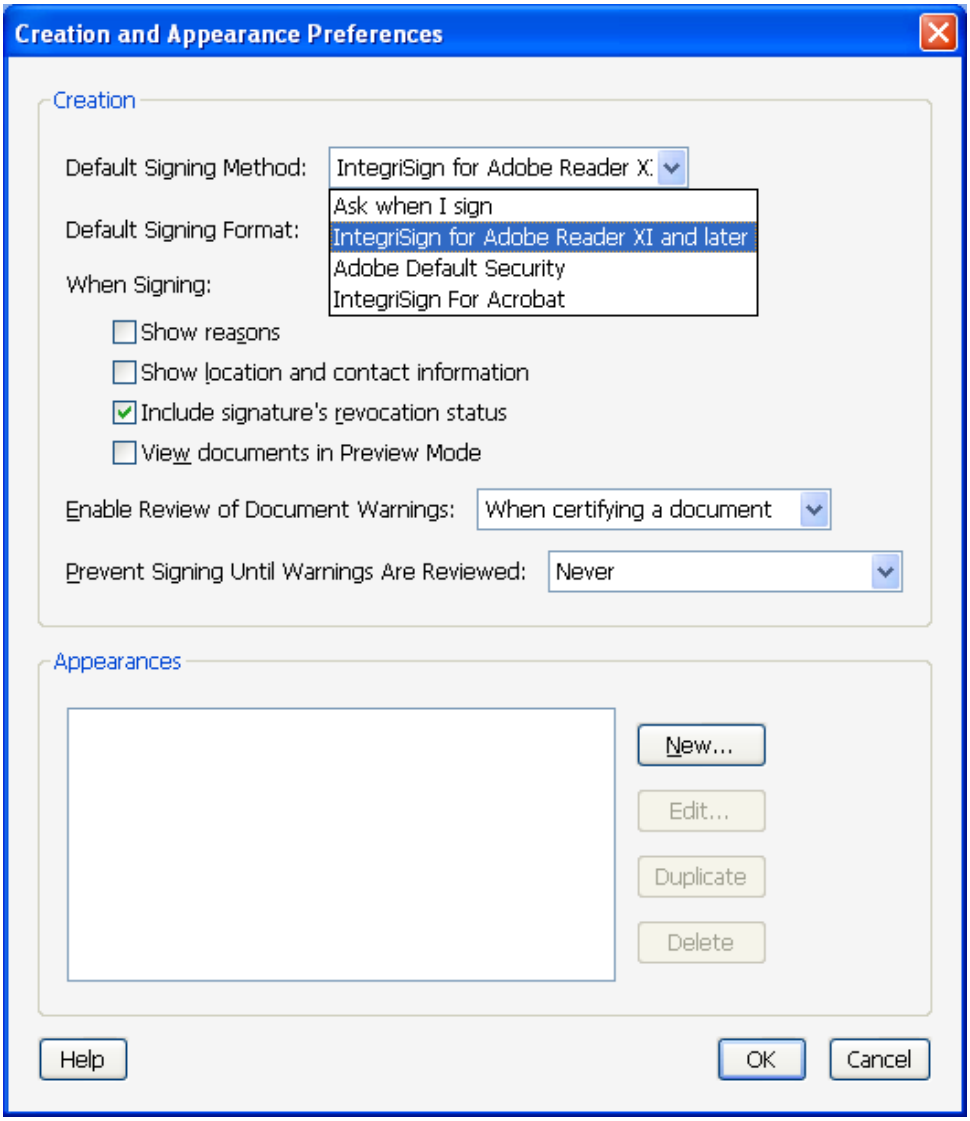


Note:

In case IntegriSign signature capture window is not displayed automatically in Acrobat/Reader 11.0, click ‘Preferences’ in the Edit menu. Select ‘Signatures’. On the right-hand side click the "More" button in “Create & Appearance” section. In the displayed window, set the “Default Signing Method" to “IntegriSign for Acrobat 9.0 and later” if it is Acrobat 11.0 and “IntegriSign for Adobe Reader XI and later” if it is Adobe Reader 11.0 as shown in the images below. Click on OK. In case IntegriSign Desktop software is not installed properly you may not see this option.


Creation and Appearance Preferences
Creation
Default Signing Method:
IntegriSign for Acrobat 9.0 and l
Ask when I sign
IntegriSign for Acrobat 9.0 and later
Adobe Default Security
IntegriSign For Acrobat
Default Signing Format:
When Signing:
Show reasons
Show location and contact information
Include signature's revocation status
View documents in Preview Mode
Enable Review of Document Warnings:
When certifying a document
Prevent Signing Until Warnings Are Reviewed:
Never
Appearances
New...
Edit...
Duplicate
Delete
Help
OK
Cancel

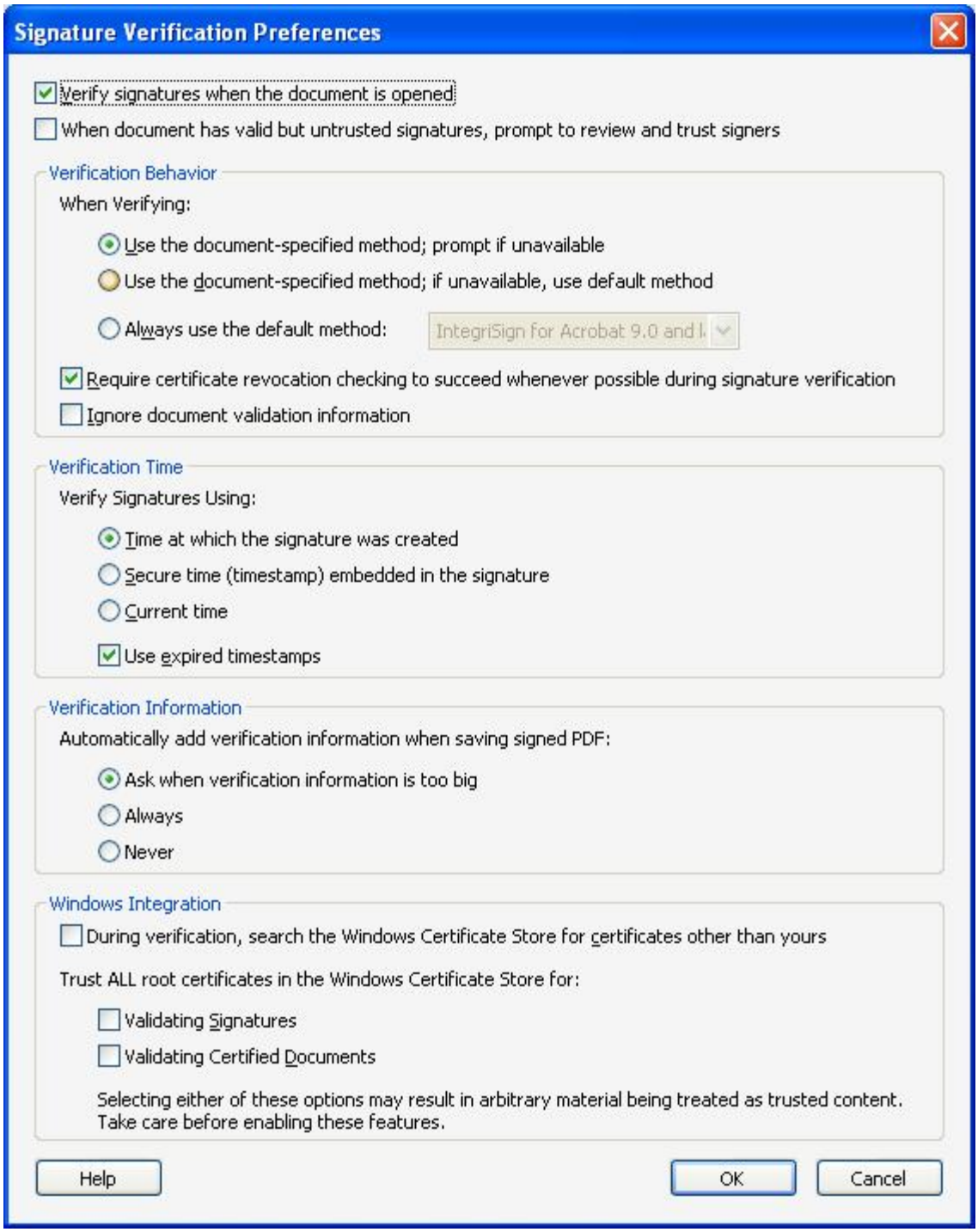
Acrobat 11.0



Adobe Reader 11.0

When IntegriSign Desktop is properly installed, in the "Default Signing Method" drop down list, you will also see "IntegriSign for Acrobat" option. The purpose of this handler is to validate signatures signed using earlier versions of Acrobat. For signing in Acrobat/Reader 9.0, Acrobat 10.0 and Acrobat 11.0, use only "IntegriSign for Acrobat 9.0 and later". For signing in Reader 11.0, use the "IntegriSign for Adobe Reader XI and later".

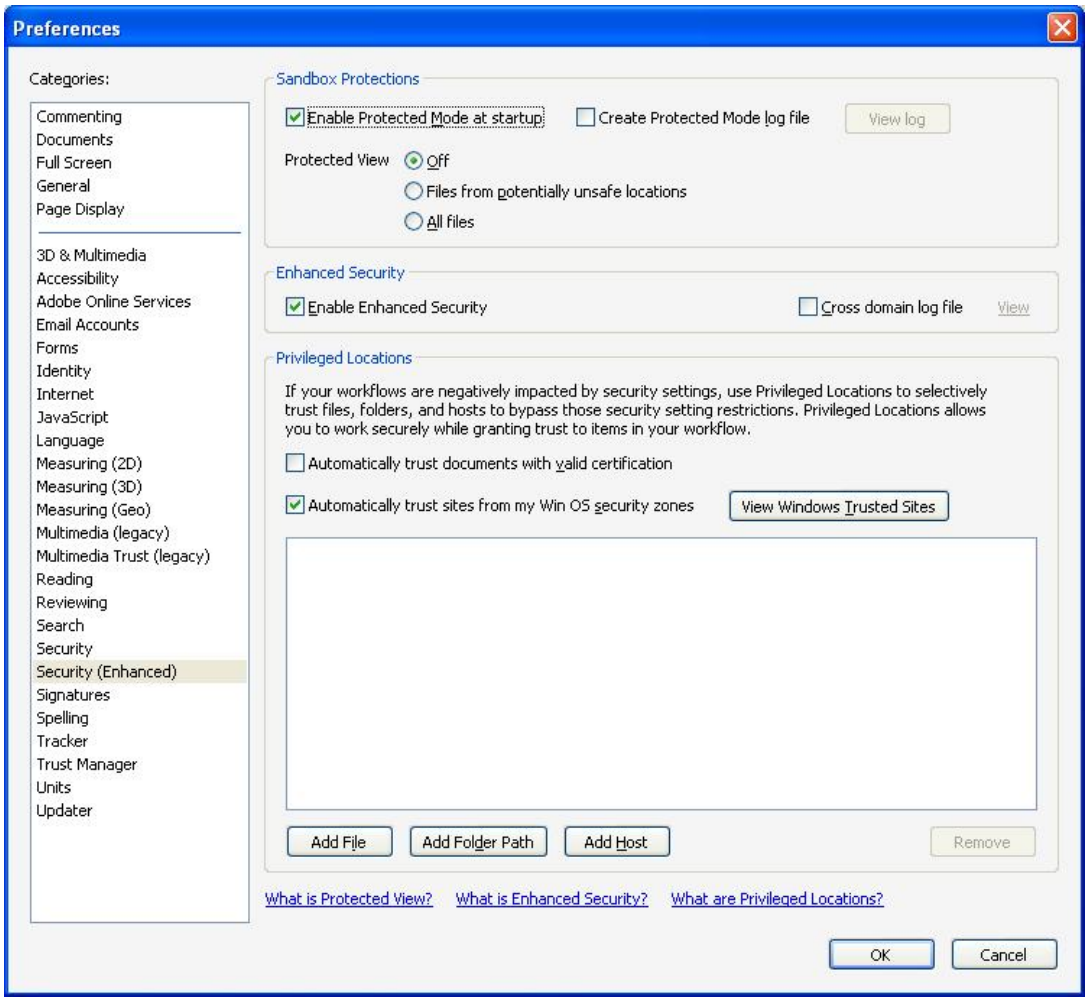
In the "Verification" screen (that can be viewed using Edit -> Preferences -> Signatures -> Verification -> More), make sure that the option "Use the document-specified method. Prompt if it is not available." is checked under "Verification behavior". This is the default option, if it was not manually modified by the user. See the screenshot below for reference.



In Acrobat/Reader 11.0, Signatures signed using IntegriSign can be verified using Acrobat's standard handler (i.e. "Adobe Default Security") in the absence of any IntegriSign software.

2.7 Signing in Adobe Reader 11

In Adobe Reader 11.0, by default, the "Enable Protected Mode at Startup" option under "Edit -> Preferences -> Security (Enhanced) -> Sandbox Protections" would be in enabled mode. See the screenshot below.



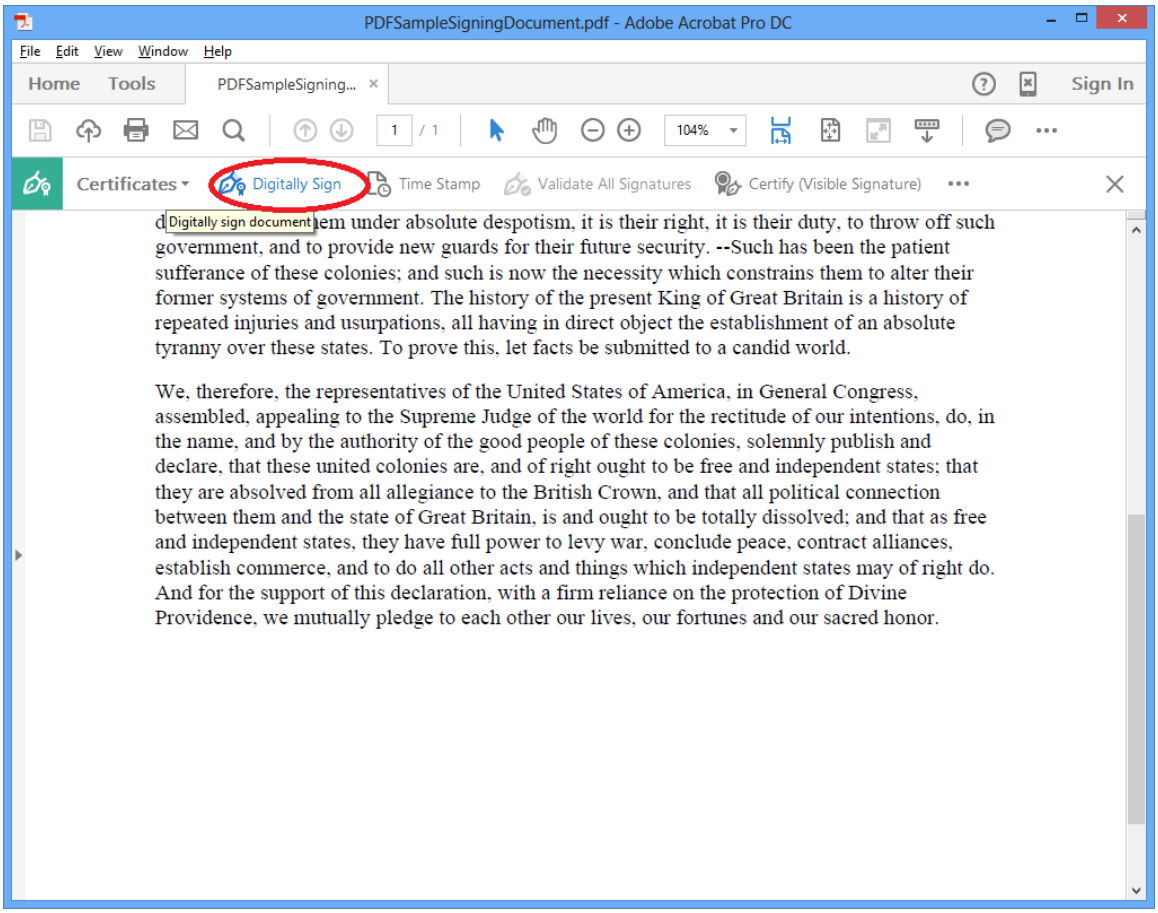
When one tries to sign a signature when this setting is on, after clicking on the "OK" button in the Signature Capture window or on the signature capture device, one would be prompted with the "SaveAs" screen. Once the document is saved, the signature is applied to the document. If "Enable Protected Mode at startup" is disabled (i.e. unchecked), the signature gets applied to the PDF document without the "SaveAs" prompt and the document gets saved.

2.8 Creating a Signature in Adobe Acrobat DC

Signing in Adobe Acrobat Professional DC can be accomplished in the following ways.

Method I

1. Open the PDF document to be signed.
2. Click on the “Tools” tab, click on “Certificates” and then click on the “Digitally Sign” (in the top toolbar).

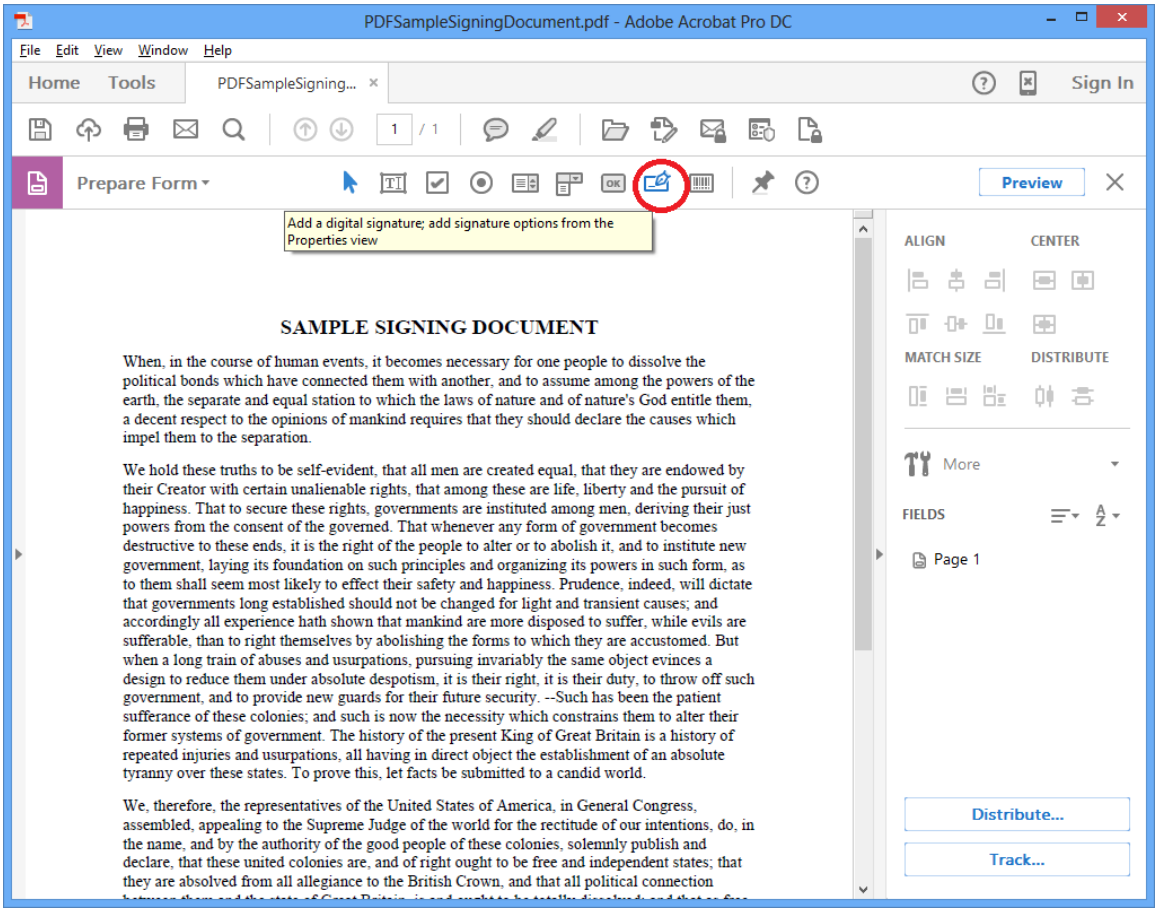


3. Click and drag to draw the area where you would like the signature to appear on your document.
4. Start signing in the displayed signature window.

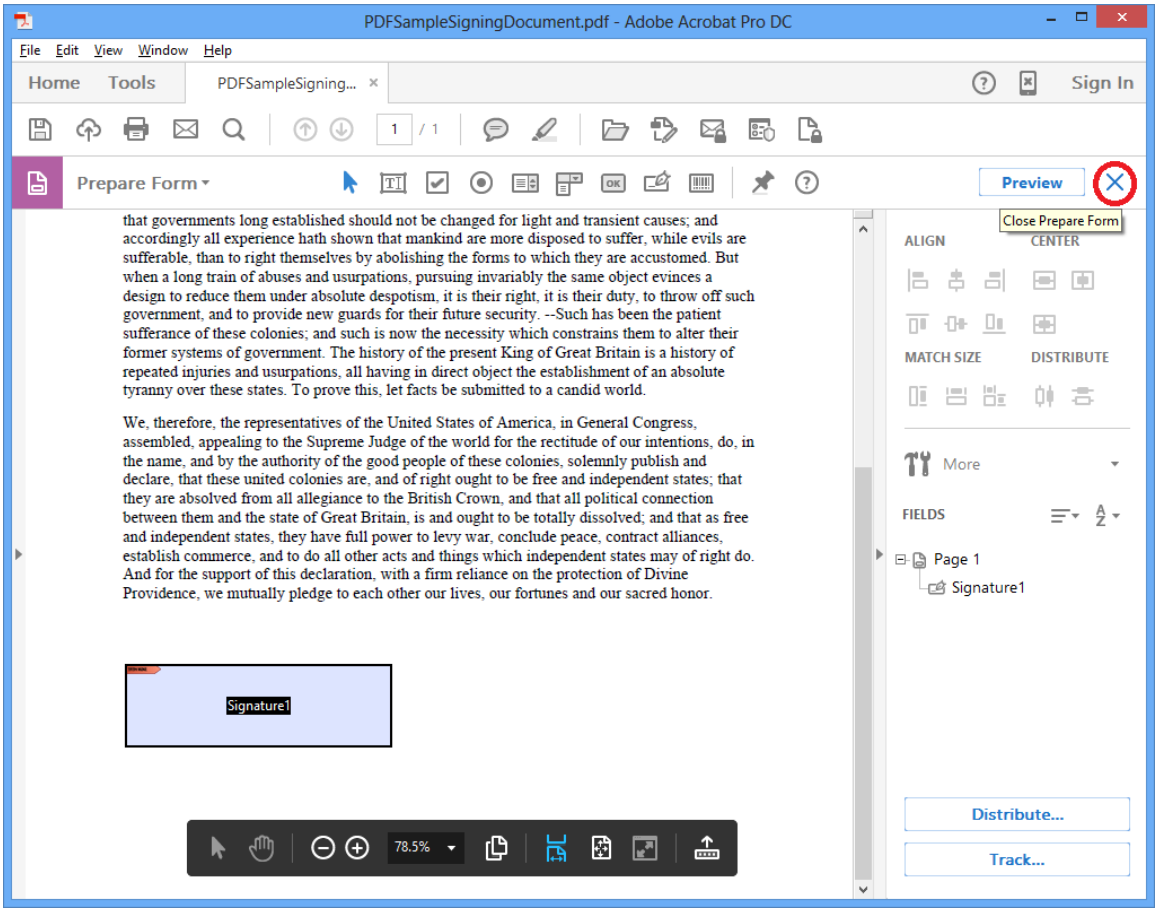
Method II

Placing an Empty Signature field

1. Click “Tools” and then “Prepare Form”, and select the document you wish to sign.
2. Near the top of the window, click the “Add a digital signature” button.

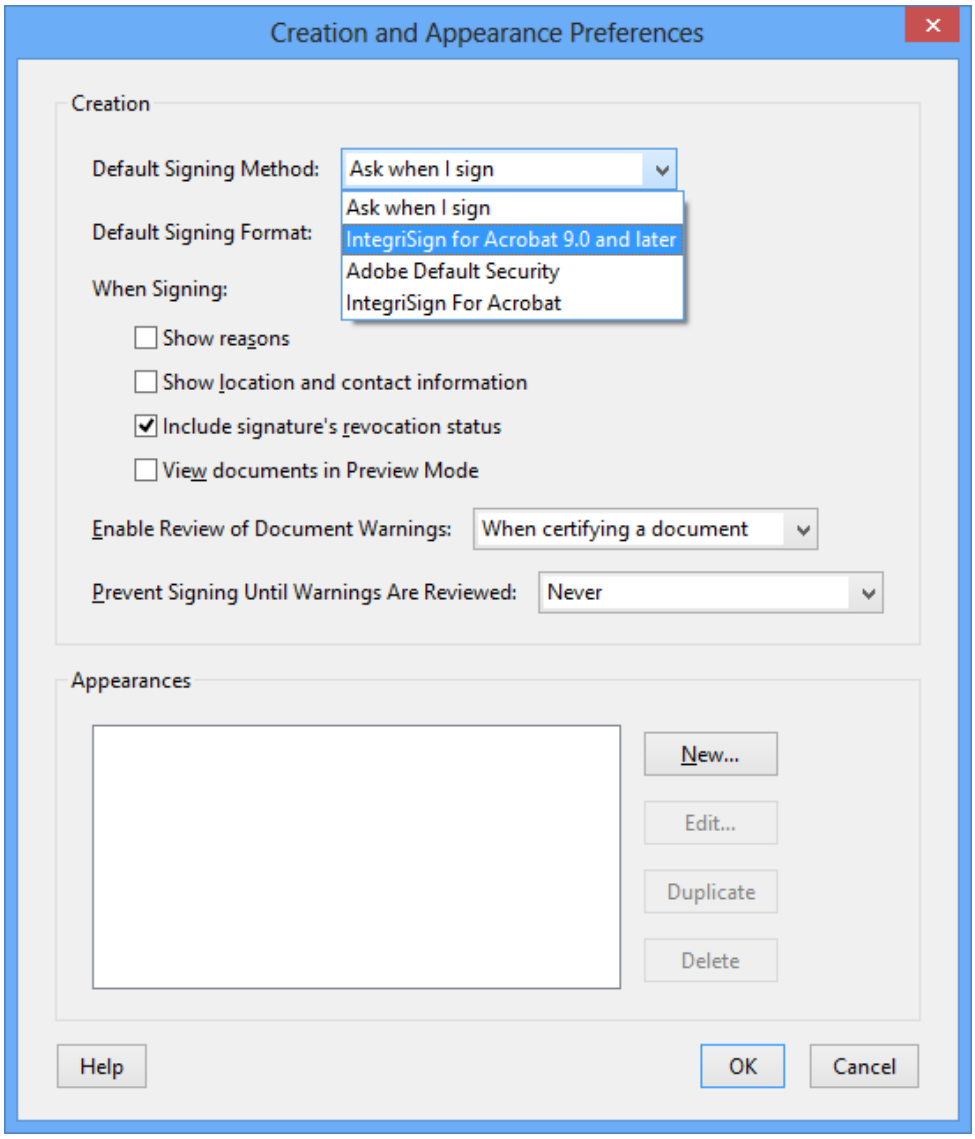


3. Click and drag a signature box to the desired size and position with your mouse. After doing so, name the signature, check if it needs to be a “Required field”, and exit out of the signature box by clicking anywhere on the PDF.
4. Click the “X” in the “Prepare Form” menu to exit out of the “Prepare Form” mode.

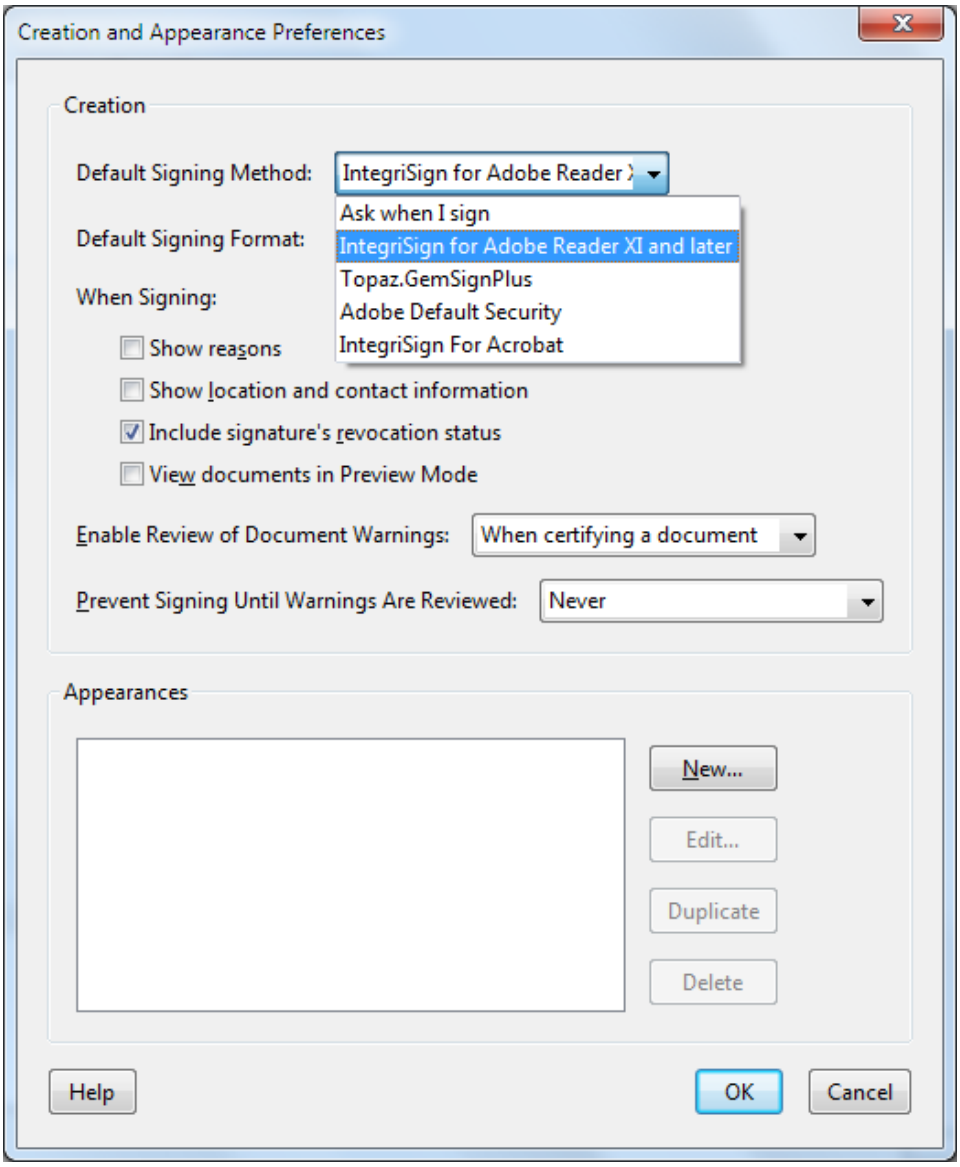


Note:

In case IntegriSign signature capture window is not displayed automatically in Acrobat/Reader DC, click ‘Preferences’ in the Edit menu. Select ‘Signatures’. On the right-hand side click the "More" button in “Create & Appearance” section. In the displayed window, set the “Default Signing Method" to “IntegriSign for Acrobat 9.0 and later” if it is Adobe Acrobat DC and “IntegriSign for Adobe Reader XI and later” if it is Adobe Reader DC as shown in the images below. Click on OK. In case IntegriSign Desktop software is not installed properly you may not see this option.



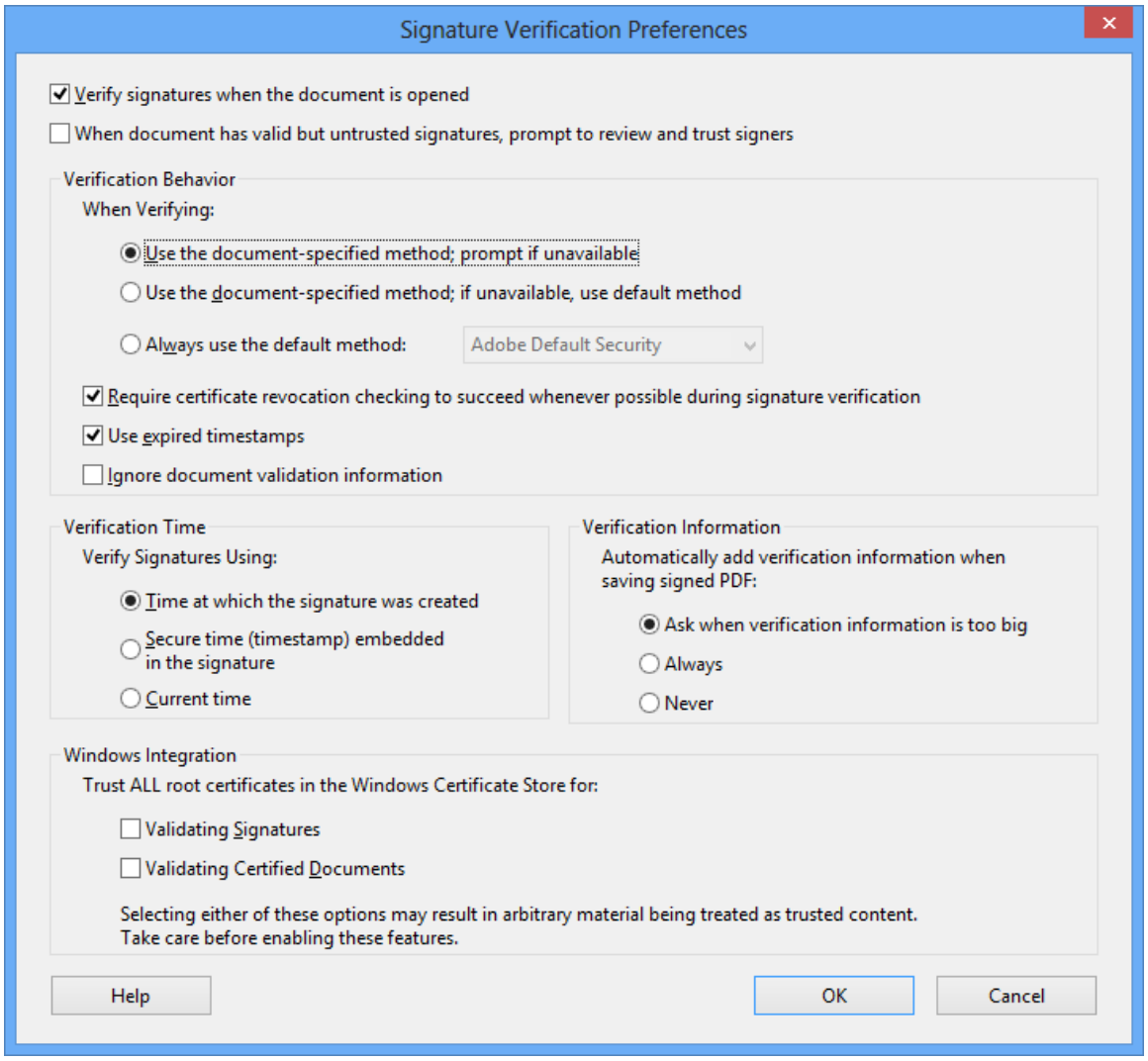
Adobe Acrobat DC



Adobe Reader DC

When IntegriSign Desktop is properly installed, in the "Default Signing Method" drop down list, you will also see "IntegriSign for Acrobat" option. The purpose of this handler is to validate signatures signed using earlier versions of Acrobat. For signing in Acrobat/Reader 9.0, Acrobat 10.0, Acrobat 11.0 and Acrobat DC, use only "IntegriSign for Acrobat 9.0 and later". For signing in Reader DC, use the "IntegriSign for Adobe Reader XI and later".

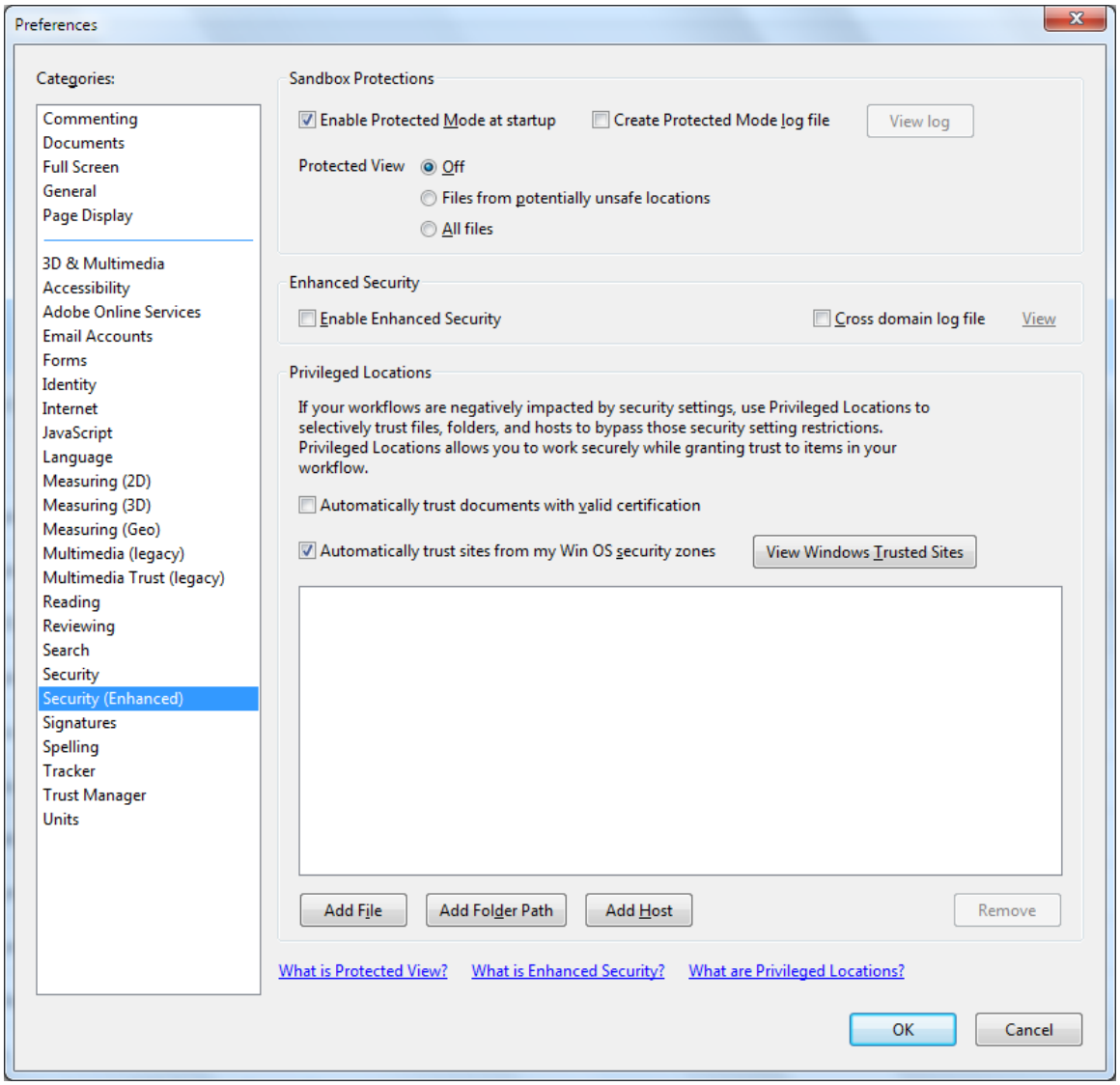
In the "Verification" screen (that can be viewed using Edit -> Preferences -> Signatures -> Verification -> More), make sure that the option "Use the document-specified method. Prompt if it is not available." is checked under "Verification behavior". This is the default option, if it was not manually modified by the user. See the screenshot below for reference.



In Acrobat/Reader DC, Signatures signed using IntegriSign can be verified using Acrobat's standard handler (i.e. "Adobe Default Security") in the absence of any IntegriSign software.

2.9 Signing in Adobe Reader DC

In Adobe Reader DC, by default, the "Enable Protected Mode at Startup" option under "Edit -> Preferences -> Security (Enhanced) -> Sandbox Protections" would be in enabled mode. See the screenshot below.

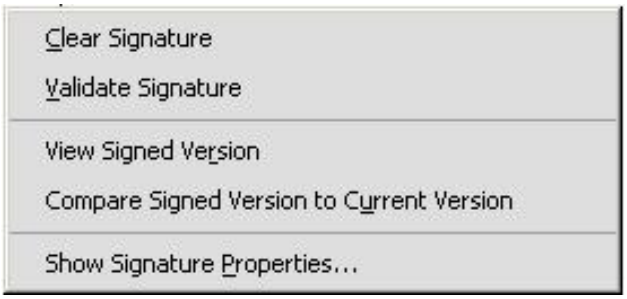


When one tries to sign a signature when this setting is on, after clicking on the "OK" button in the Signature Capture window or on the signature capture device, one would be prompted with the "SaveAs" screen. Once the document is saved, the signature is applied to the document. If "Enable Protected Mode at startup" is disabled (i.e. unchecked), the signature gets applied to the PDF document without the "SaveAs" prompt and the document gets saved.

2.10 Document Verification

Go to the toolbar and select the Hand tool. Right click on the signature in the document.

1. Acrobat 8.0, Acrobat 9.0, Acrobat 10.0, Acrobat 11.0 and Acrobat DC display a window with the following options



Clear Signature Field: Clears the signature field.

Validate Signature: IntegriSign for Acrobat checks to see if the document and the signature have been altered after signing.

View Signed Version: IntegriSign for Acrobat displays a window that shows the version of the file that is present at the time of signing.

Compare Signed Version to Current Document: If a document is signed more than once, IntegriSign for Acrobat maintains all of the signed versions in a single Adobe PDF file. The earlier versions can be compared with the current document with this option.

Properties: Clicking on this option shows a Window with the Sign Info showing the Image of the signature, ePad device information and the signer info.

2.11 Opening an signed document

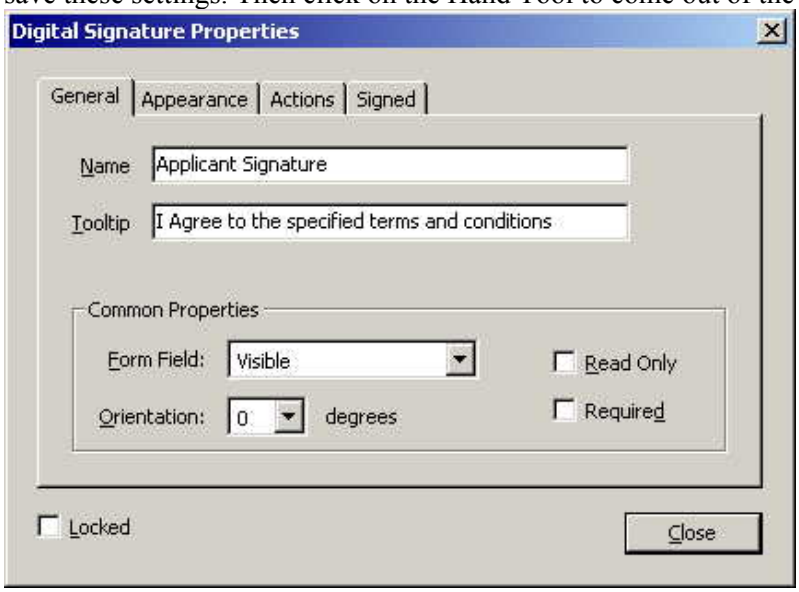
In order to check document integrity, click on the 'key' icon on Adobe's bottom task bar and select the "Show Signatures" option or go to **Window → Show Signatures.** All the signatures in the document are displayed on the signature palette with a plus sign next to each signature. Clicking on the plus sign expands to show the properties of each signature. If the document was modified after signing, then the signature on the palette is shown as invalidated with a red triangle mark next to the signature

2.12 Setting Affirmation Text to ePad LCD devices

IntegriSign Acrobat plug-in lets the user to configure the affirmation text that is to be displayed on the ePad LCD device above the signature capture screen. The text is displayed on the device up to maximum of 5 lines. There are two options to accomplish this.

Option 1: ToolTip text

Acrobat allows setting the Tooltip text (in case of Acrobat 8.0 or later) to any of the Acrobat form fields. IntegriSign Acrobat Plug-In leverages these properties to set the text to be displayed above the signature capture area on the ePad LCD devices. To set the Tooltip text, click on the Object tool icon on the toolbar to edit the signature field properties. Then right click on the signature field and then select Properties. In the displayed dialog, navigate to General tab and then enter the ToolTip text. Click OK to save these settings. Then click on the Hand Tool to come out of the field editing mode.



Option 2: Smart Field inside the PDF document.

Create a hidden filed inside the PDF with the name '**ePadInkDesc**' and assign the text to be displayed as affirmation text on the device as value of this field. During the act of signing the Plug-In looks for this field in the document, if found the same is displayed as affirmation text on the device. The text can contain a new line character '\n' to wrap the text into multiple lines. If no \n is supplied then the software wraps the text into lines if the text cannot be fit into one line.

If both the options are used, then the smart filed approach has preference and the text set to the hidden field will be set as affirmation text.

2.13 Troubleshooting

Adobe Acrobat:

If the IntegriSign signature is not listed in the Digital Signature Handler's list of the Digital signature tool, then check for IntegriSign7.api (in case of Acrobat 8.0) and IntegriSign9.api (in case of Acrobat 9.0, 10.0, 11.0 and DC) in the plug-ins folder of Adobe (typically "C:\Program Files\Adobe\Adobe Acrobat

x.0\Acrobat\Plug_ins"). If not present, copy the appropriate file from the IntegriSign installation folder to the plug-ins folder and restart Adobe Acrobat.

Adobe Reader:

If the IntegriSign signature is not listed in the Digital Signature Handler's list of the Digital signature tool, then check for IntegriSign7.api in case of Adobe Reader 8.0), IntegriSign9.api in case of Adobe Reader 9.0, IntegriSignR10.api in case of Adobe Reader 10.0 and IntegriSignR11.api in case of Adobe Reader 11.0 and Adobe Reader DC in the plug-ins folder of Adobe Reader (typically "C:\Program Files\Adobe\Adobe Reader x.0\Reader\Plug_ins"). If not present, copy the appropriate file from the IntegriSign installation folder to the plug-ins folder and restart Adobe Reader.

2. Sometimes, in Acrobat 10.0/Reader 10.0, the signature looks like a dotted signature as shown below.

This happens if the "Use 2D graphics acceleration" option under "Edit -> Preferences->Page Display" is checked. IntegriSign Desktop installation during the installation itself turns off this setting. If this setting is enabled again after IntegriSign Desktop is installed, one would see this issue. Turning off this setting would display the signature correctly.