

Digital Signatures with AutoCAD and CoSign





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Introduction

AutoCAD from AutoDesk is the premier application for design professionals. More information about AutoCAD.

AutoCAD natively works with CoSign to digitally sign and verify drawing files.



Supported File Types

AutoCAD enables you to digitally sign only files that are compatible with AutoCAD 2000 and later file formats. You can digitally sign the following file types:

- EXE and ZIP files generated by eTransmit
- DWG and DWT files that are compatible with AutoCAD 2000 and later drawing-file formats
- DWS files (not available in AutoCAD LT)

Digitally Signing PDF Files or Drawings?

As an alternative to signing drawing files, AutoCAD can also be used to create PDF files from drawings. The PDF files can then be digitally signed using CoSign OmniSign or other PDF applications including Acrobat, Bluebeam Revu, Trapeze, etc. Depending on your project requirements, you may want to produce and sign both drawing and pdf files.

Digitally Signing Drawing files with CoSign

The following sections detail the steps needed to digitally sign files from AutoCAD using CoSign.

Digital signatures can only be attached to files that are compatible with the AutoCAD 2000 and later drawing-file formats.

Once you attach a digital signature to a drawing file, it will either be valid or invalid. You cannot remove the digital signature from the drawing file. If a digital signature was attached to a drawing in error, save the drawing in DXF format, open the DXF file, and then save it in DWG format.

Configure CoSign Client

First install the CoSign Client software on your Windows PC.

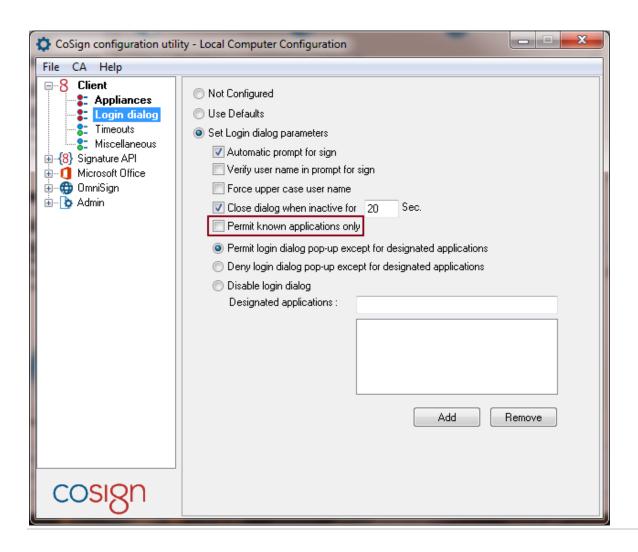
Configure it with a CoSign signing service: your organization's CoSign Central server or CoSign Cloud. Check your configuration by digitally signing a PDF document using CoSign OmniSign.

To sign with AutoCAD, an additional configuration setting is needed:

- 1. From the **CoSign configuration utility**, select *Client Configuration*, then expand the *Client* settings, then select *Login dialog*
- 2. Click Set login dialog parameters
- 3. **Uncheck** *Permit known applications only*—it should **not** be checked



Please see the screenshot below.



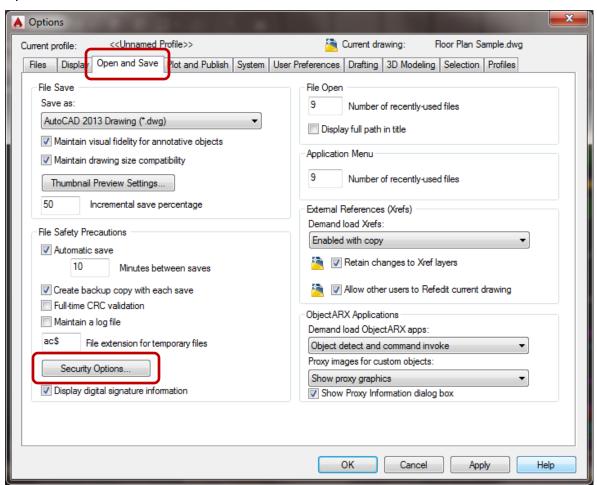


Digitally Signing a Drawing

An AutoCAD 2015 drawing can be signed in several ways:

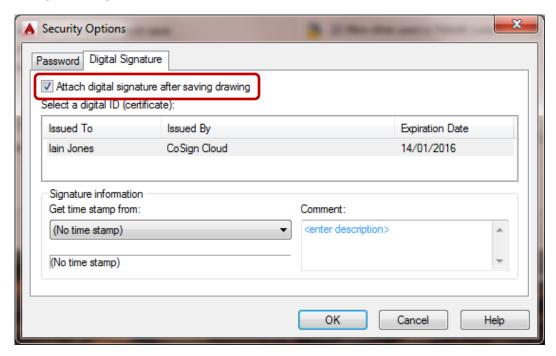
Set Options to Sign While Saving

1. Select the Autodesk AutoCAD icon in the top left of the application then the options button towards the bottom right of the popup window. In the Options dialog box (see below), select the open and Save tab, and then select the security Options... button.





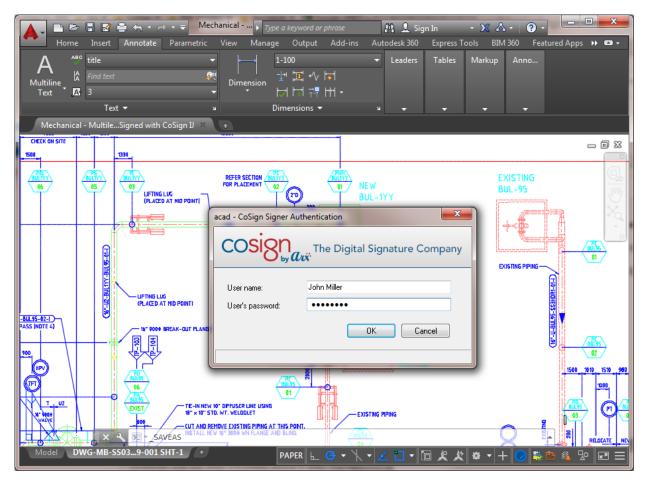
2. From the Security Options dialog select the Digital Signature tab, check Attach a digital signature after saving a drawing.



- 3. Optionally, add time stamp information or a comment under Signature Information.
- 4. Select OK, Apply, then OK to exit the Options dialog



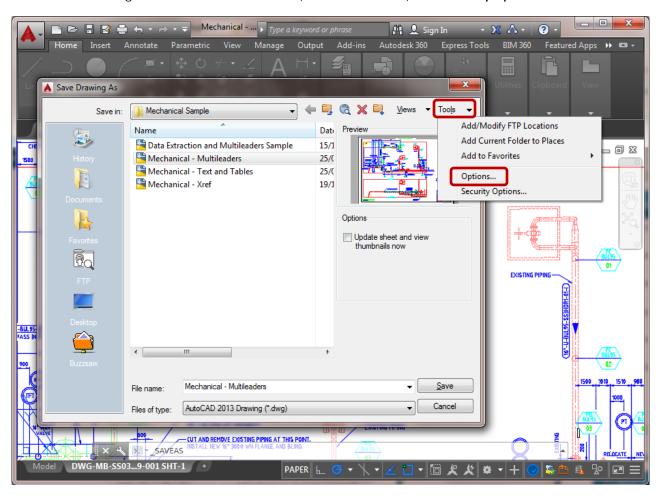
5. Go back to the drawing and select **Save As.** As part of the save process, you will be prompted to authenticate, and the drawing will be signed.





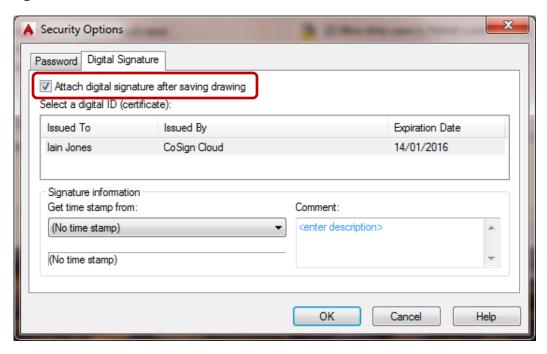
Sign While Saving

1. Select a drawing then select Save or Save As, then select Tools, then Security Options...



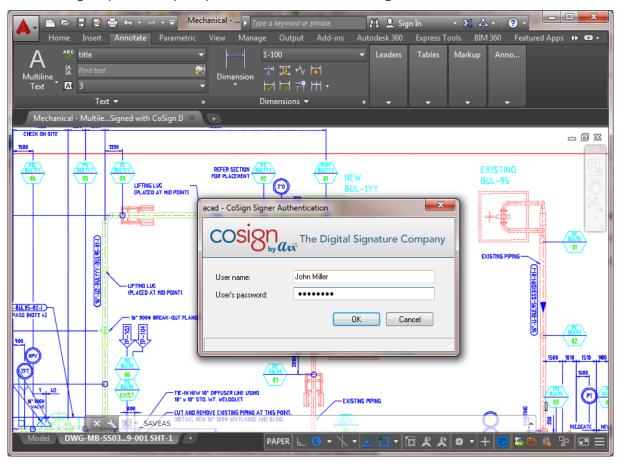


2. From the **Security Options** dialog (see below), select the **Digital Signature** tab, then select **Attach a digital signature after saving a drawing.** Optionally add time stamp information or a comment under Signature Information.





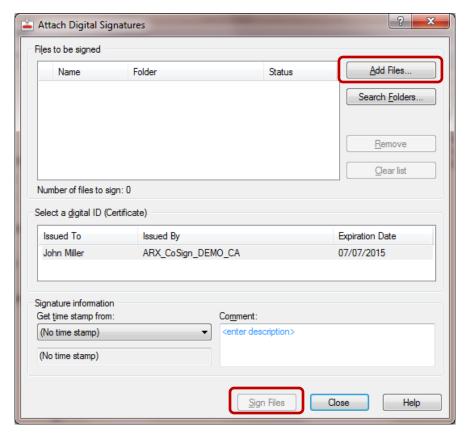
3. After clicking **OK** you will be prompted to authenticate with CoSign.





Signing Multiple Drawing Files At Once

- 1. Click the Windows Start menu ➤ All Programs ➤ Autodesk ➤ <AutoCAD Product Name> ➤ Attach Digital Signatures
- 2. In the Attach Digital Signatures dialog box, click Add Files.



You can select the files individually or drag them into the dialog from Windows Explorer.

- 3. Use the **Select File** dialog to select the files you want to sign. Click **Open**.
- 4. In the Attach Digital Signatures dialog, choose a digital ID and click Sign Files.
- 5. If a file is set as *read-only*, you can choose to sign it or skip it. Your choice can also be used for subsequent read-only files.
- 6. When all the files have been processed, the Signing Complete message displays the number of files that were signed. Click **OK**.



Files that were successfully signed display Signed in the Status column of the Files to Be Signed list.

Validating Signed Drawings

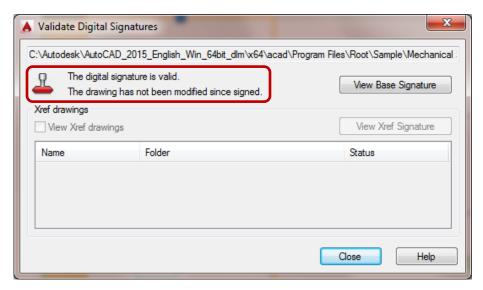
AutoCAD offers several different methods for validating the signatures of signed drawings.

Using the AutoCAD Validate Digital Signatures Icon

- 1. Open a signed file.
- 2. On the status bar, click the Validate Digital Signatures icon.



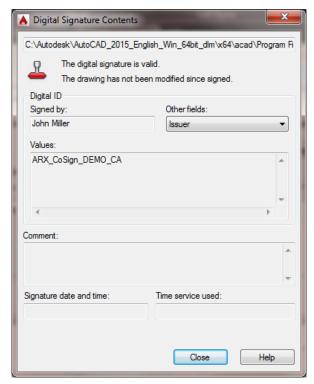
3. The **Validate Digital Signatures** dialog will validate and summarize the status of the drawing's digital signature.



4. If the file has a valid digital signature, you can further examine it by clicking View Base Signature.



5. The **Digital Signature Contents** dialog displays details of the digital signature including as the signer's common name, comments about the digital signature, time stamp, and more.



- 6. Click Close.
- 7. If the drawing includes external references (Xref) to other drawings that contain digital signatures, select **View Xref Drawings** in the **Validate Digital Signatures** dialog. Click **View Xref Signature** to view the xRef drawing's signature details.

Validate Signatures from Windows Explorer

1. In Windows Explorer, locate a drawing file whose digital signature you want to check. Signed drawings are displayed with the Digital Signatures icon.



Some operating systems display a modified icon for a drawing that has a valid digital signature attached.

2. Right-click the file name. Click Properties.



- 3. In the Properties dialog box, if the file contains a digital signature, the Digital Signature tab is displayed. Click the Digital Signatures tab to view the digital signature details.
 - A Valid Signature icon is displayed if a digital signature is valid, and an Invalid Signature icon is displayed if the digital signature is not valid.
- 4. In the Other Fields list, select an option from the list to view details of the digital signature, such as the issuer, description, and expiration date of the digital ID. You can also view the time stamp and time service.

Toggle the Display of the Digital Signatures Icon in Windows Explorer

- 1. In Windows Explorer, locate a file that has a digital signature icon.
- 2. Right-click the file name. Click Enable/Disable Digital Signature Icons.
- 3. Click the check box next to Validate Digital Signatures and Display Special Icons to turn on the icon display in Windows Explorer, or clear the check box to turn off the icon display.
- 4. Click OK. Log out of Windows, and then log back in.

Control the Display of Digital Signature Status within AutoCAD

- 1. Click **Tools** menu **> Options**.
- 2. In the **Options** dialog, **Open and Save** tab, select or clear **Display Digital Signature Information** (SIGWARN system variable):
 - If Display Digital Signature Information is selected and you open a file with a valid signature, the digital signature status is displayed.
 - If Display Digital Signature Information is not selected and you open a file, the digital signature status is displayed only if the signature is invalid.

Resources

AutoDesk Knowledge base articles on Digital Signatures