

Will E-Signature Stand Up in Court?

How DocuSign ensures the integrity and reliability of documents in our system

It is well established that electronic signatures are legal and enforceable under the laws of the United States, the European Union, Australia and virtually every other industrialized nation. At the same time, you may be wondering exactly what DocuSign does to ensure that documents in its system are signed by the right person and are appropriately preserved so that they can be sure that the electronic signature will stand up in court.

In this paper, we answer these questions by outlining the workflow of how documents are signed and secured in the DocuSign eSignature platform.

The signing process

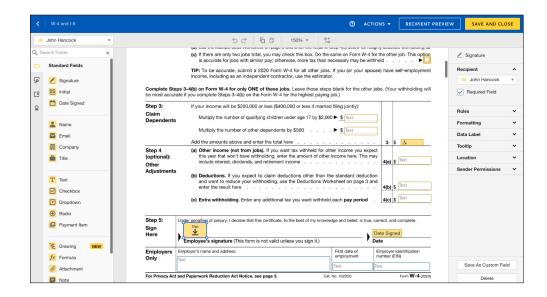
The inherent simplicity of electronic signatures makes it easy to dismiss them as merely a 21st-century substitute for ink-to-paper signatures. In fact, electronic signatures are far more advanced than they appear.

Electronic signatures are full SaaS solutions that authenticate, track and store signatures and signer information at every stage of the contract lifecycle. Just like handwritten signatures, e-signatures are unique to each signer. However, while witness testimony and handwriting are the only way to guarantee the validity of a traditional signature, e-signatures offer added layers of authentication.

The exact signing process varies depending on the e-signature provider that you use, but the underlying workflows of more robust solutions are similar.

Sending

Upload the document you need signed, such as a Word document or a PDF file **Tag** the sections that require initials, signatures, phone numbers, etc. **Select** the methods of signer authentication you want to use **Send** the file via the service to your designated recipient's email



Quick Note

If you want additional security, DocuSign gives you the ability to add signer authentication to an Envelope. Signer authentication is a way to verify identity before an individual can view or sign a document. DocuSign provides several authentication methods, and allows you to require one or more authentication options for each signer. For any authentication option you select, the signer must proceed through the authentication procedure before he or she can sign.

Methods of verifying signer identity

E-signature technology offers multiple options for verifying a signer's identity before they can access the document and sign, including:

Email address

Signers enter their own email address, which is compared to the email addressed used in the invitation

Access code

The sender supplies a one-time passcode that signers must enter

Phone call

Signers must call a phone number and enter their name and access code

SMS

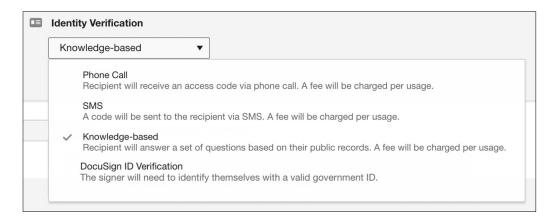
Signers must enter a one-time passcode sent via SMS text message

Knowledge-based

Signers are asked questions about information, such as past addresses or vehicles owned

ID verification

Signers are verified using their **governmentissued photo IDs** or European eID schemes



For situations where additional levels of signature validity are necessary, some providers offer two additional levels of e-signature that comply with the EU's eIDAS requirements:

Advanced

Requires a higher level of security, identity verification and authentication to establish a link to the signatory; and includes certificate-based digital ID (X.509 PKI) issued by a trusted service provider.

Qualified

An even more secure version of an advanced e-signature that utilizes a "secure signature creation device" and is deemed legally identical to a wet signature in the EU.

Once the sender has selected their preferred method of signer authentication, the document or group of documents is ready to be shared with one or more signers. In DocuSign eSignature, this packet of documents is referred to as an "envelope" and is ready to be signed.

Signing

Receive an email notification to review and sign a document

To complete the document, the signer must simply click a button included in the email labeled "Review Document." This URL is unique to the signer and is only valid for a short period of time.

Verify your identity before signing (if the sender selects that option)

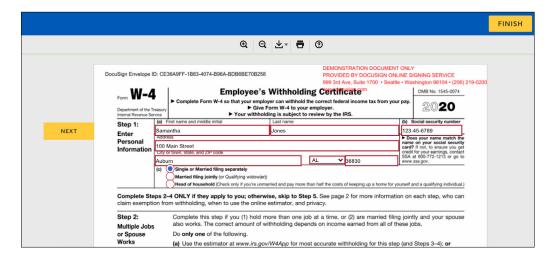
Read the disclosure documents and agree to use the electronic process

Review the document and complete any necessary fields, including attaching any required documents

Adopt the signature style you want to use (the first time you use a service)

When the document is ready to be reviewed and signed, the system presents the document on the signer's computer screen within their web browser. If the signer wants to review a paper version of the document, a printer-friendly version of the document is available for download as a PDF anytime during signing.

Once the signer is viewing the documents, he or she can scroll through the documents or be automatically moved to the first location where a signature, initial, or other information is required, by clicking the "Next" button on the left side of the document.



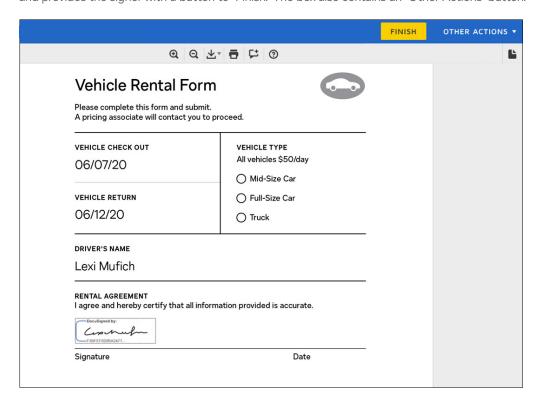
Of course, the system treats two specific types of fields as special: signature fields and initials fields. These fields are shown to the signer with the words "Sign" or "Initial," at each location within the document that the signer must complete one of these actions.

The first time the signer clicks on one of these special fields, the signer's name and initials are presented on the screen in several predefined fonts and sizes from which the signer may choose. Thereafter, each time the document is signed or initialized, the graphic representation of the signer's adopted electronic signature appears on the document. In addition to the signer's name and initials, a Globally Unique Identifier ("GUID") is assigned to the signer, and appears as part of the graphic representation of the electronic signature. The GUID is also written into a secured record maintained by DocuSign.

At the same time, the screen also shows a message that ensures that the signer agrees that his or her signature and initials will be a binding electronic representation of his or her signature. The signer adopts the electronic signature by clicking on a button labeled "Adopt and Sign."



After all required information is added and signature and initial tabs have been clicked, the screen displays a box at the bottom of the screen letting the signer know that he or she is done signing, and provides the signer with a button to "Finish." The box also contains an "Other Actions" button.



Sign the document

If the signer clicks the "Other Actions" button, the signer can review and print the envelope documents which will include the graphic representation of his or her signature on the documents. The signer may also cancel the transaction at this point in signing. If the signer clicks the "Finish" button, the signer's signatures and/or initials are applied to the PDF file of the document. Once the "Finish" button is clicked, the system then generates a hash based on the industry-standard SHA-1 (Secure Hash Algorithm 1) algorithm to seal the document.

Finally, the signing is considered final and the system records the date and time in the transaction log.

Once all recipients have signed a document, all relevant parties are notified, and the document is stored electronically where it can be viewed and downloaded. All of this is done safely due to the built-in security features and the processes that e-signature providers follow.

After signing security and the Certificate of Completion

After completion, the signer is provided with an opportunity to print or download the signed documents and related signing information, or the signer may open an account with DocuSign to access the documents online and use his or her adopted signature in future DocuSign transactions. The signed documents are provided in PDF for printing or downloading. Once signed, the system notifies the sender that the signer has finalized the document.

The information on the signer, the envelope and the documents are maintained by the system in what we call the Certificate of Completion. The Certificate of Completion contains a summary about the Envelope that includes:

- 1/ A specific Envelope ID
- 2/ The identity of the sender
- 3/ The identity of the signer(s) of the documents,
- 4/ A graphic representation of their signatures
- 5/ The date and time stamp of when the document was sent, when it was viewed and when it was signed, and
- 6/ The IP address where each of the above actions took place.

The Certificates of Completion are available to all parties to any agreement and DocuSign maintains electronic copies of the Certificates of Completion in its secure data centers.

Certificate Of Completion		
Envelope Id: 452C6E1E462F4F3D846BF28EFD14AE35 Subject: Please DocuSign: Tally Insurance Application Source Envelope:		Status: Completed
Document Pages: 2 Certificate Pages: 5 AutoNav: Enabled Envelopeld Stamping: Disabled Time Zone: (UTC-05:00) Eastern Time (US & Canad	Signatures: 1 Initials: 0	Envelope Originator: Ben Wilkins 100 Main Street Nashville, TN 12345 benwilkins2021@gmail.com IP Address: 12.148.184.130
Record Tracking		
Status: Original 1/15/2021 5:53:55 PM	Holder: Ben Wilkins benwilkins2021@gmail.com	Location: DocuSign
Signer Events	Signature	Timestamp
Michael Lopez mikelopez8675309@gmail.com Security Level: Email, Account Authentication (None), Access Code	Decusioned by: Michael Lorce 116E10B0041A4DA Signature Adoption: Pre-selected Style Using IP Address: 12.148.184.130	Sent: 1/15/2021 5:54:06 PM Viewed: 1/15/2021 5:54:28 PM Signed: 1/15/2021 5:54:48 PM
Electronic Record and Signature Disclosure: Accepted: 1/15/2021 5:46:57 PM ID: 540ab20d-2ded-4e4e-bcce-9e706393c6b7		

An example

Take a typical example of an insurance application being signed. In this case, Tally Insurance employee Ben Wilkins is sending a contract to be signed by Tally customer Michael Lopez.

The Certificate of Completion lists "Ben Wilkins" as the "Envelope Originator." This means that the account of Ben Wilkins was the sender of the Envelope containing the document to be electronically signed. The Certificate of Completion shows "Envelope Number" as "452C6E1E462F4F3D846BF28EFD14AE35" which is a unique number to the particular set of digital documents contained in this Envelope. Ben Wilkins sent the envelope from the email address "bwilkens@tally.net" from an IP Address reported as 12.148.184.130..

The Certificate of Completion lists the email address "mikelopez8675309@gmail.com" under the name, Michael Lopez. This means that mikelopez8675309@gmail.com was the email address selected for signing for Michael Lopez. It also shows that the document was signed at the IP address 12.148.184.130 which correlates to the location of Michael Lopez's home.

The Certificate of Completion also shows that an "Access Code" was used as a second authentication method before the signer identified as Michael Lopez could access the Envelope and initiate signing. In order to pass the Access Code authentication method, Michael was required to correctly input the access code provided to him by Ben Wilkins. In the example above, the Certificate of Completion contains all of the details mentioned above, including all IP addresses and times that actions occurred.

Quick Note

In addition to the passcode, Ben could have used a wide variety of methods to identify Michael. He could have simply used Michael's unique email address, he could have used an automated phone call, a text message, knowledgebased identification (where signers are asked questions about personal but public information, such as past addresses or vehicles owned), or required ID verification verifying Michael's identity with government-issued photo IDs or European electronic ID schemes.

Post-signature security

Once the signing process is complete, all documents are digitally sealed using Public Key Infrastructure (PKI) encryption, an industry-standard technology. This seal ensures the electronic signature is valid and that the document isn't tampered with or altered since the date of signing.

In addition to the security measures discussed above, DocuSign maintains

- Geo-dispersed data centers with active and redundant systems and physical and logically separated networks
- Commercial-grade firewalls and border routers to detect IP-based and denial-of-service attacks
- Malware protection
- Secure, near real-time data replication
- Around-the-clock onsite security
- Strict physical access control with monitored video surveillance
- Data encryption in transit and at rest with TLS connections and AES 256-bit encryption

Security certifications and processes

ISO 27001:2013

The highest level of global information security assurance available today.

SOC 1 Type 2 and SOC 2 Type 2

Both reports evaluate internal controls, policies and procedures, with the SOC 2 report focusing on those directly related to security, availability, processing integrity, confidentiality and privacy at a service organization.

Payment Card Industry Data Security Standard (PCI DSS)

Ensures safe and secure handling of credit card holder information.

Cloud Security Alliance (CSA) Security Trust Assurance and Risk (STAR) program

Comprises key principles of transparency, rigorous auditing and harmonization of standards.

Security management processes and development practices, including business continuity and disaster recovery planning, employee training, secure coding practices, formal code reviews and regular code-base security audits.

DocuSign takes the integrity and security of our processes and system very seriously and has built a reputation on our core values of Trusted, Loved and Responsible. We continue to invest in our platform, which is why documents signed using DocuSign eSignature have been validated in courts across jurisdictions. For more information on court support for eSignature in your country, please see the eSignature Legality Guide. For more information on the safety and security of DocuSign eSignature, visit the DocuSign Trust Center.