

Using PGP TrustCenter's Digital Certificates with Adobe Acrobat v8 and Adobe Reader

To use any of the security features in Adobe Acrobat and Reader, you must first obtain a digital certificate. If you do not already have a digital certificate, please visit PGP TrustCenter's website at <http://www.pgptrustcenter.com/digital-certificate-solutions>.

"TC Business ID for Adobe" is used for digitally signing PDF documents and completable PDF forms. Your communication partners can easily verify and display the integrity and authorship of your PDFs using the free Adobe Reader - without any manual intervention or additional plug-ins.

TC Business IDs for Adobe are issued by an Adobe-signed TC Adobe Root so that every Acrobat Reader will automatically recognize a TC Business ID for Adobe as trustworthy.



When viewing a signed or certified PDF document with Acrobat Reader the signature information and validation will be presented automatically - independent of whether the user is online or not. The validation of the signer's certificate takes place at the signing time and this information will be timestamped as well. For this reason, no further Internet access is required.

About Digital Signatures

You can digitally sign a document for many of the same reasons you might sign a paper document. A digital signature is used to authenticate digital information — such as documents, e-mail messages, and macros — by using computer cryptography. Digital signatures help to establish the following assurances:

- **Authenticity:** The digital signature helps to assure that the signer is who he or she claims to be.
- **Integrity:** The digital signature helps to assure that the content has not been changed or tampered with since it was digitally signed.
- **Non-repudiation:** The digital signature helps to prove to all parties the origin of the signed content. "Repudiation" refers to the act of a signer's denying any association with the signed content.

To make these assurances, the content creator must digitally sign the content by using a signature that satisfies the following criteria:

- The digital signature is valid (legitimate, current, and not expired or revoked).
- The certificate associated with the digital signature is current (not expired).
- The signing person or organization, known as the publisher, is trusted.
- The certificate associated with the digital signature is issued to the signing publisher by a reputable certificate authority (CA) such as PGP TrustCenter.

Digitally Signing PDFs with Adobe Acrobat v8

There are two types of signings that may be applied to Adobe documents:



Signing:

To sign a document means to apply a digital signature to it. A document that has been signed can usually also be signed by other persons later on, provided that corresponding signature fields are present. Therefore, the use of the digital signature is well suited for PDF documents such as letters or routing slips (with multiple signatures). In a signed document, the signature is always visible.



Certifying:

Alternatively, a document may be certified once. Certifying permits additional signatures in corresponding signature fields as well as content changes through the completion of fields in PDF forms, i.e. a certified PDF form that is subsequently completed will retain its valid certification.

Permitting signing with Adobe Reader

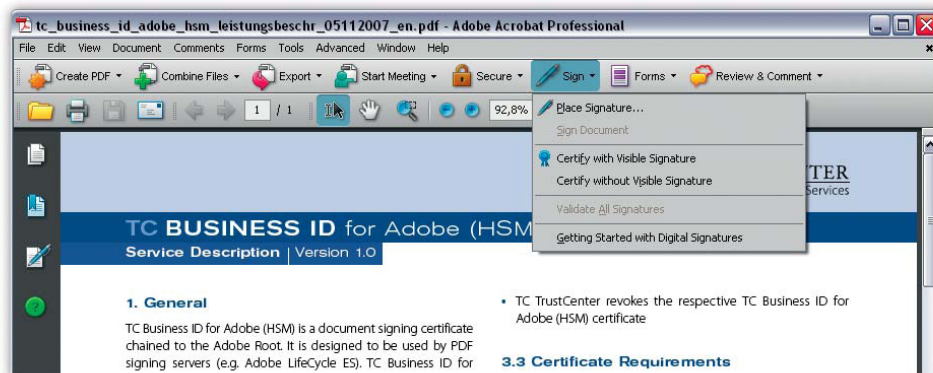
In order to authorize users that do not work with Adobe Acrobat Professional to sign a signed PDF, "Enable usage rights in Adobe Reader" under the menu item "Extended" must be selected.

Signing /Certifying

Start the Adobe Acrobat Professional application. (Note: The figures below are based on Version 8. The use of the TC Business ID for Adobe is also possible with Acrobat Professional Version 6).



Open your PDF document that you want to sign and click on the "Sign" button. You can choose among three signature variants.

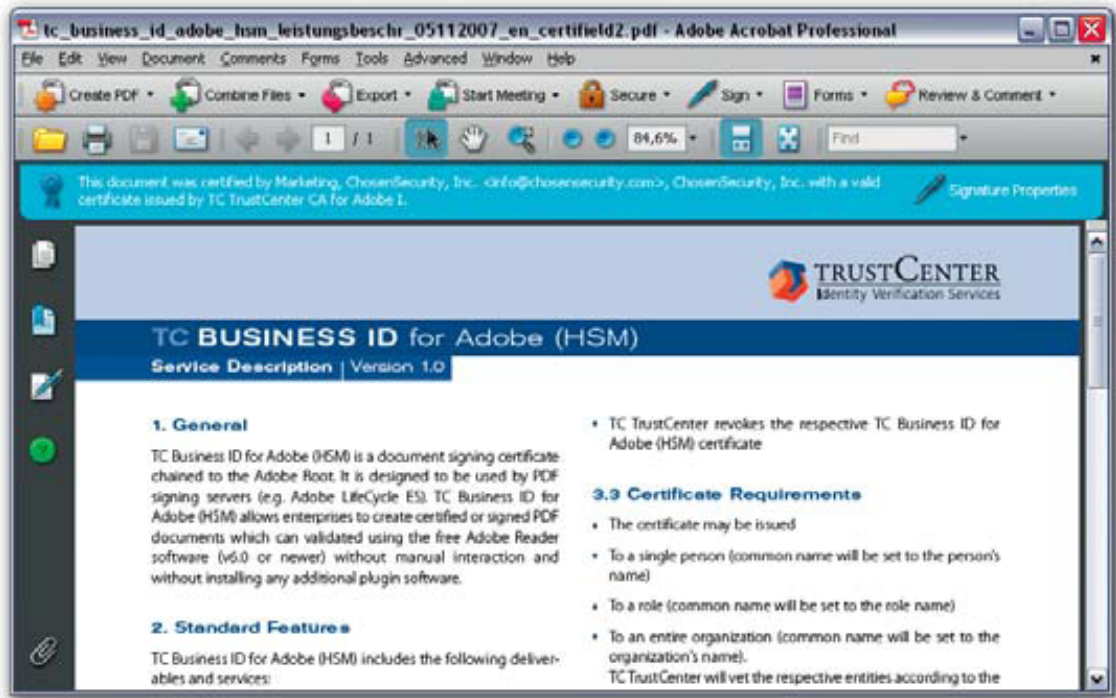


The three signature options are:

1. Place a signature
2. Certify with visible signature or
3. Certify without visible signature

Options 1 and 2 create a signature that is visible within the PDF. When using the third option, it is only indicated by the "blue ribbon" (the blue ribbon appears between the toolbar and the document) in Acrobat Reader and Adobe Acrobat Professional that this document has been certified.

The "blue ribbon" is basically displayed for all certified documents.

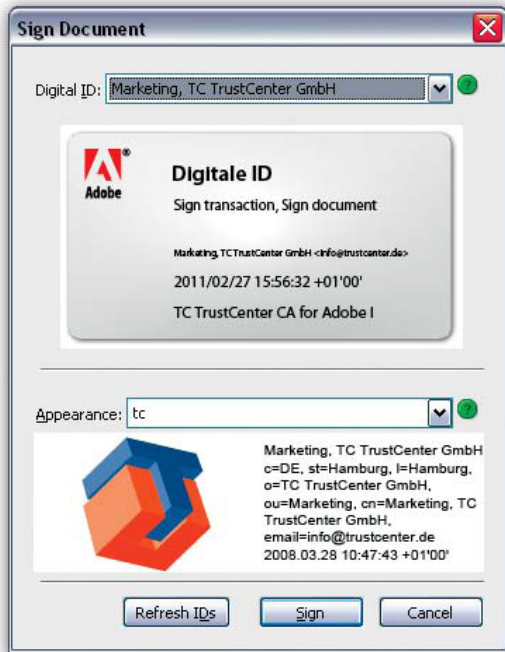


Note: In Acrobat Version 9, the "blue ribbon" is displayed for all digitally signed documents, both certified and signed.

1. Place a signature (Sign):



To sign a PDF, please select the menu item "Place Signature..." and draw a frame in the PDF document where the visible signature is to be shown. In the next step, select your Digital ID and an appearance.



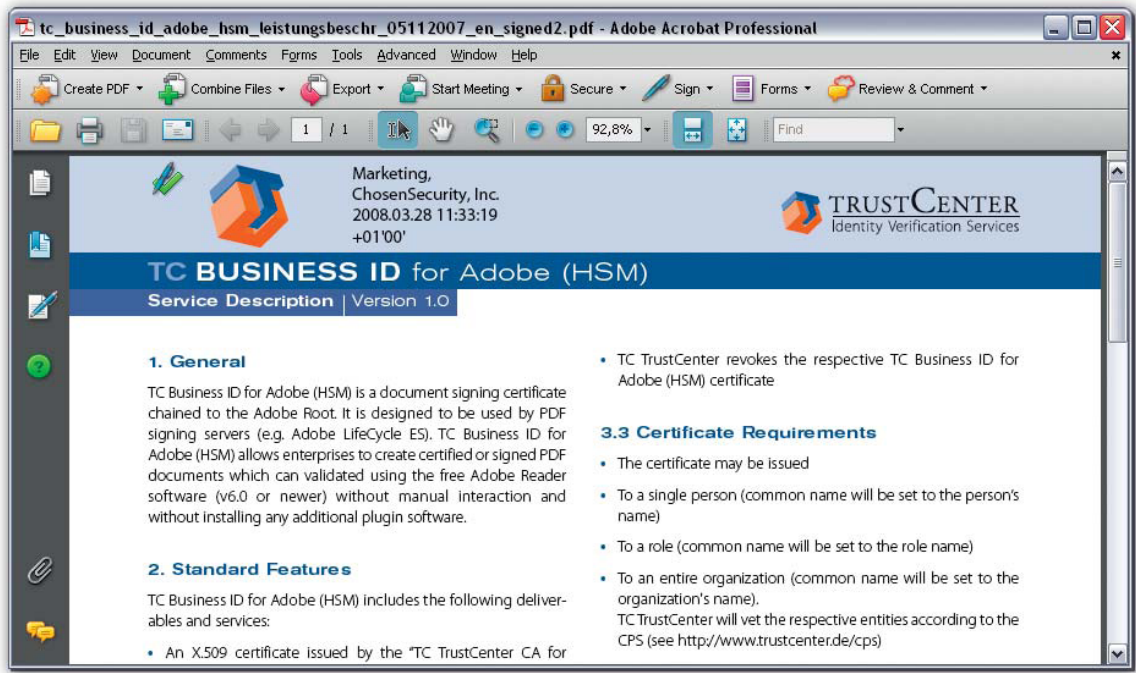
Usually the ID of your USB token is displayed here. Confirm the input by clicking on the "Sign" button.

In the next step, enter a filename and storage location where the signed PDF document will be saved. Click on "Save".

You are then requested to enter the PIN of your TC Business ID for Adobe token.



When the PIN has been entered, your signature will immediately appear in the document.



2. Certify with a Visible Signature



If you want to certify a document with a visible signature, please select the corresponding menu item and draw a frame in the PDF document where the visible signature is to be shown. When you have defined the area, you also need to select which kinds of changes you want to authorize after certification:

- > No changes permitted
- > Completion of forms and digital signatures
- > Comments, completion of forms and digital signatures

Note: Digital signatures can be added only if signature fields are present in the PDF document. If no signature fields have been defined, no other additional persons can sign this document.



Finally, enter the filename and storage location and click on "Save". You are requested to enter the PIN of your TC Business ID for Adobe token:



When the PIN has been entered, your signature will immediately appear in the document:

tc_business_id_adobe_hsm_leistungsbeschr_05112007_en_certifield_visible2.pdf - Adobe Acrobat Professional

File Edit View Document Comments Forms Tools Advanced Window Help

Create PDF Combine Files Export Start Meeting Secure Sign Forms Review & Comment

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This document was certified by Marketing, ChosenSecurity, Inc. <info@chosensecurity.com>, ChosenSecurity, Inc. with a valid certificate issued by TC TrustCenter CA for Adobe 1. Signature Properties

3.1 Key Pair Requirements


- The customer has to provide hardware key generation and storage on a device meeting or exceeding the FIPS 140-2 level 2 standards.
- The minimum key length is RSA 2048bit.

3.2 Certificate Revocation

- The customer notifies TC TrustCenter as soon as the suspected compromise is detected.
- On their letterhead the customer faxes a signed letter requesting TC TrustCenter to revoke the signed Company CA Certificate.

in the ST-field

- e. the name of the person or role or the organization in the CN-field, depending on the certificate holder (see section 3.3).

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Document certified by Marketing, ChosenSecurity, Inc. <info@chosensecurity.com>

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TC TrustCenter GmbH

3. Certify without a Visible Signature



If you want to certify a document without a visible signature, please select the menu item "Certify without Visible Signature".

With this scenario, you must select which changes in the document you want to authorize after certification:

- > No changes permitted
- > Completion of forms and digital signatures
- > Comments, completion of forms and digital signatures

Note: Digital signatures can be added only if signature fields are present in the PDF document. If no signature fields have been defined, no other persons can sign this document additionally.

Finally, enter the filename and storage location and click on "Save". You are requested to enter the PIN of your TC Business ID for Adobe token:



The certification is now only displayed via the "blue ribbon". No visible signature has been inserted in the PDF.

Troubleshooting



Validity UNKNOWN (Question Mark) – (Revoked, Expired or non trusted Digital ID)

After signing your documents, if a question mark is displayed and you get the comment "The validity of the document certification is UNKNOWN. The author could not be verified" then you most likely lack the "TC TrustCenter CA for Adobe I" CA certificate. Please import the TC TrustCenter CA for Adobe I into the Adobe certificate store using the following instructions.

Importing the "TC TrustCenter CA for Adobe I" CA certificate into the Adobe certificate store:

Download the "TC TrustCenter CA for Adobe I" CA certificate from the TC TrustCenter Web site and import it manually into the Adobe certificate store.

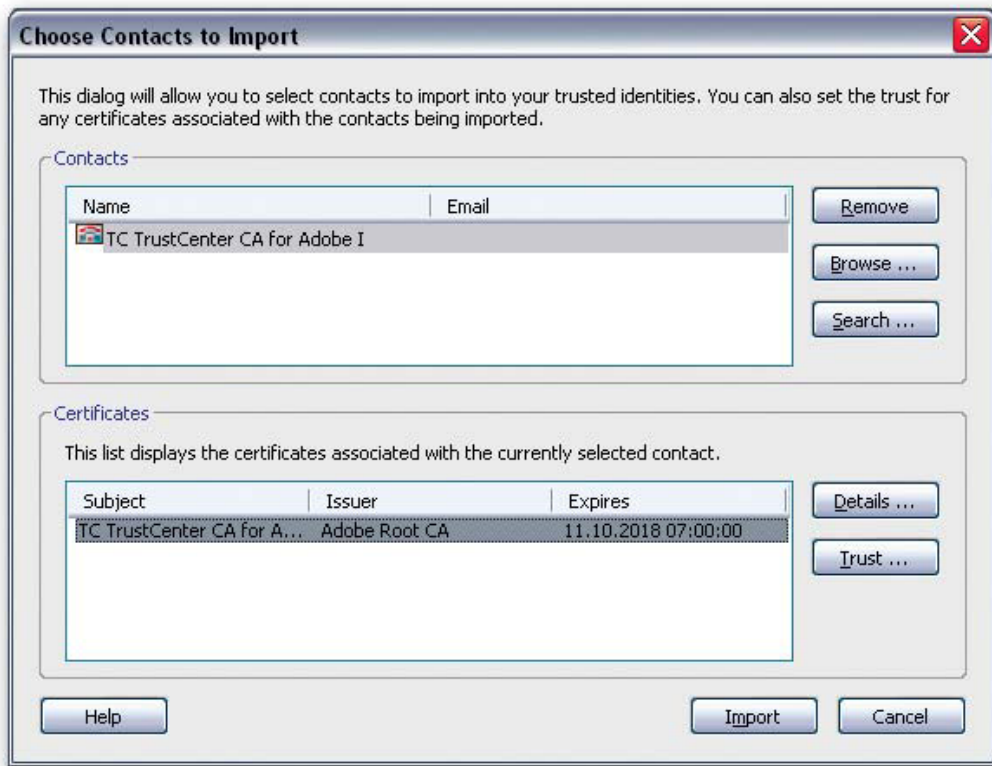
https://www.trustcenter.de/media/TC_TrustCenter_CA_for_Adobe_I.cer

For this purpose, go to "Extended" > "Manage trusted identities..." in Adobe Acrobat and choose in "Display:" the entry "Certificates" from the dropdown menu. In Adobe Reader, this entry can be found under "Documents" > "Manage trusted identities...".

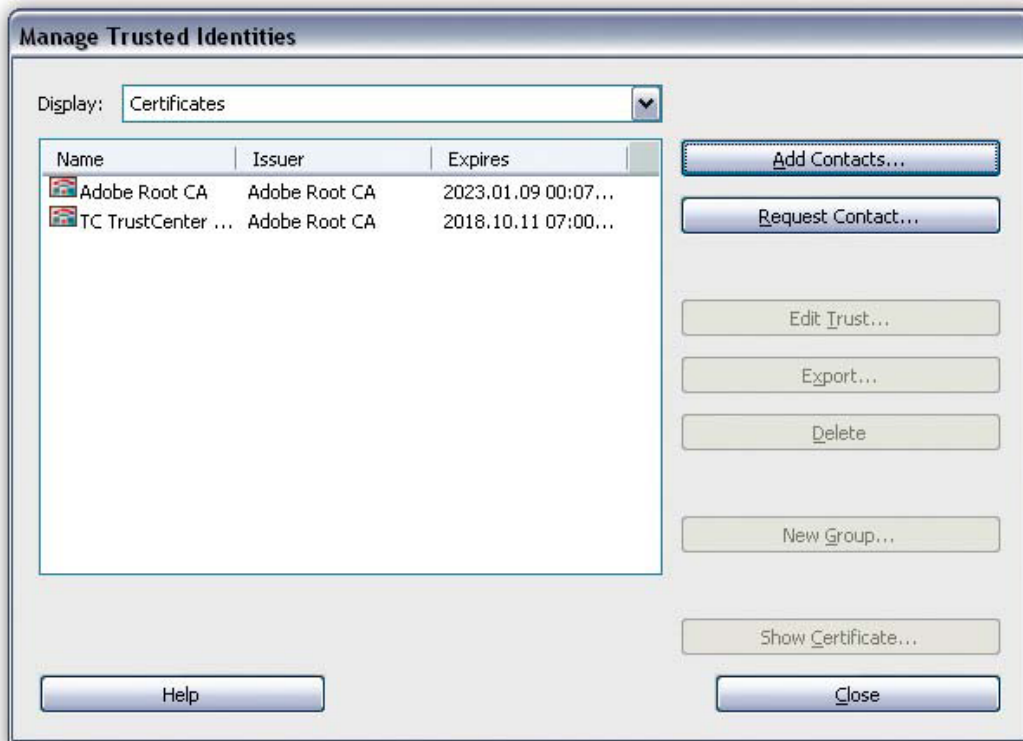
The names of the certificates that are currently installed in your Adobe application are displayed.

Now click on "Add contacts" > "Browse..." and go to the location where you have previously stored the "TC TrustCenter CA for Adobe I". Select it now and confirm with "Open". In the next window, highlight the entry and select the "Import" button.

When you reopen your signed document now, your certification / signature will be shown as valid. You should repeat the certification process, otherwise the PDF is stored in which this CA certificate is missing. The consequence of this is that your generated PDF is shown with "Validity Unknown" on all computers on which this CA certificate is not preinstalled!

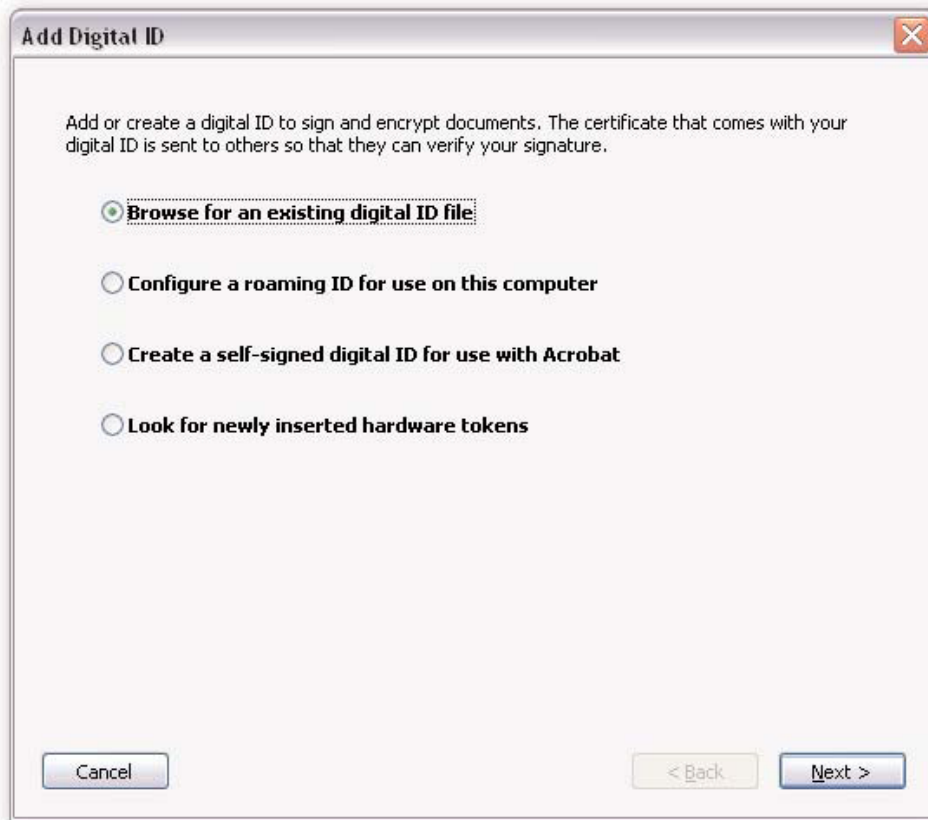


You have added the "TC TrustCenter CA for Adobe I" CA certificate to the Adobe certificate store.



Digital ID missing

If you want to sign a document and you are requested to add your Digital ID, your certificate has not been found at this time.



Please check whether you have correctly connected your token. The icon in the task bar should change its appearance. If the token is properly connected, the red X will disappear. When your USB token is recognized, this error message should no longer appear.