

Digital Signature

Digital Signature

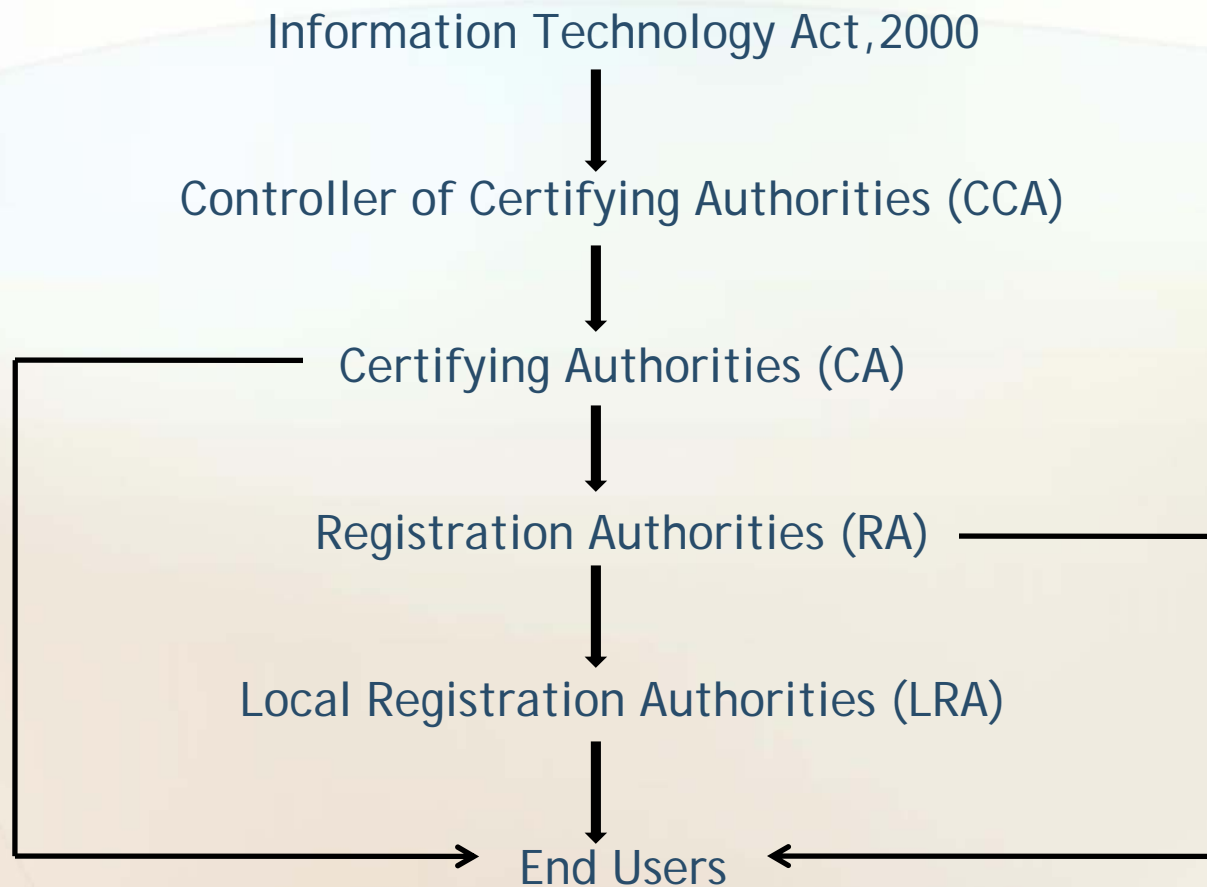
The Information Technology Act, 2000 provides for the use of Digital Signatures on the documents submitted in electronic form.

Under the provision of IT Act, 2000, the office of Controller of Certifying Authorities (CCA) appoints the Certifying Authorities (CA) by issuing Certificates for the same.

These CA will issue the Digital Signature to the End Users either Directly or through the Registration Authorities (RA) /Local Registration Authorities (LRA)

Digital Signature

How Digital Signature will be issued to the End-users.



What is Digital Signature?

- A Digital Signature authenticates electronic documents in a similar manner a handwritten signature authenticates printed documents.
- This signature cannot be forged and it asserts that a named person wrote or otherwise agreed to the document to which the signature is attached.
- Digital Signatures enable the "authentication" and "non-repudiation" of digital messages, assuring the recipient of a digital message of both the identity of the sender and the integrity of the message.
- Digital Signature can be given in either of 3 Formats namely USB token, .pfx file or .p12 file. Any one of these 3 format can be used for the authentication along with the password.

Classes in Digital Signature Certificate

There are 4 general classes of Digital Signature.

- **Class 0** : Issued for demonstration/test purpose.
- **Class 1**: Issued to Individuals/private subscribers. This class of certificate will authenticate only the User name and E-mail address.
- **Class 2**: Issued to both business personal and private individuals. This class of certificates confirms the information provided by the subscriber.
- **Class 3**: Issued to Individuals as well as Organizations. This class of certificate is used in the E-commerce application wherein high assurance of the certificates are required. This certificate is issued to an individual only on their personal appearance before the CA.

Deliverables with Digital Signature

The Digital Signature is provided with the following deliverables.

1. USB Token : Digital Signature allotted to the user .
2. Password : Password required to access the Digital Signature.
3. Driver Software : Software required to install the Digital Signature in the system.
4. Interface Software : Software which enables the user to embed the Digital Signature with the document.

Note: Only one document can be attached with the Digital Signature at a time.

The USB Token can also be stored in .pfx/.p12 format.

Contents of Digital Signature

A digital signature typically contains :

- ✓ Owner's public key,
- ✓ the Owner's name,
- ✓ Expiration date of the public key,
- ✓ the Name of the issuer (the CA that issued the Digital ID),
- ✓ Serial number of the digital signature, and
- ✓ the digital signature of the issuer.

Certification Agencies

The Certification Agencies available in India are:

- ✓ Tata Consultancy Services Ltd.
- ✓ National Informatics Centre
- ✓ Institute for Development & Research in Banking Technology (IDRBT)
- ✓ MTNL
- ✓ Customs & Central Excise (CBEC)
- ✓ (n)Code Solutions Ltd., (A division of Gujarat Narmada Valley Fertilizers Company Ltd.)
- ✓ SafeScript from Sify Communications
- ✓ E Mudhra

Form 16 and Digital Signature

Under the provision of IT Act, 2000 the digitally signed Form 16 has the same validity as of the physically signed form so as TDS Certificates issued under Income Tax Act.

Further, **Circular No. 2/2007** dated 21/5/2007 from the **Income Tax Dept** clarifies, "The Central Board of Direct Taxes have, therefore, in exercise of powers under section 119 of the Income-tax Act, 1961, decided for the proper administration of this Act to allow the deductors, at their option, in respect of the tax to be deducted at source from income chargeable under the head "Salaries" to use their digital signatures to authenticate the certificates of deduction of tax at source in Form 16."

Form 16 and Digital Signature

- Also note that, Employees/Parties are no longer required to file a copy of their Form 16/ Form 16A /Form 27D along with their I-T returns to the Income Tax Dept.

Saral eSign

Saral eSign is a software developed to Digitally sign Form 16 through the digital Signature of the user.

User should have a valid Digital Signature issued by any of the Certifying Authorities licensed under CCA.

Process flow of Saral eSign:

- 1) Picks the data from the software (Saral TDS/SPP) with TDS certificate prepared in Excel format.
- 2) Convert the Excel certificate to PDF and apply Digital signature to all PDF files, with one time authentication.
- 3) Display all the Certificates generated.

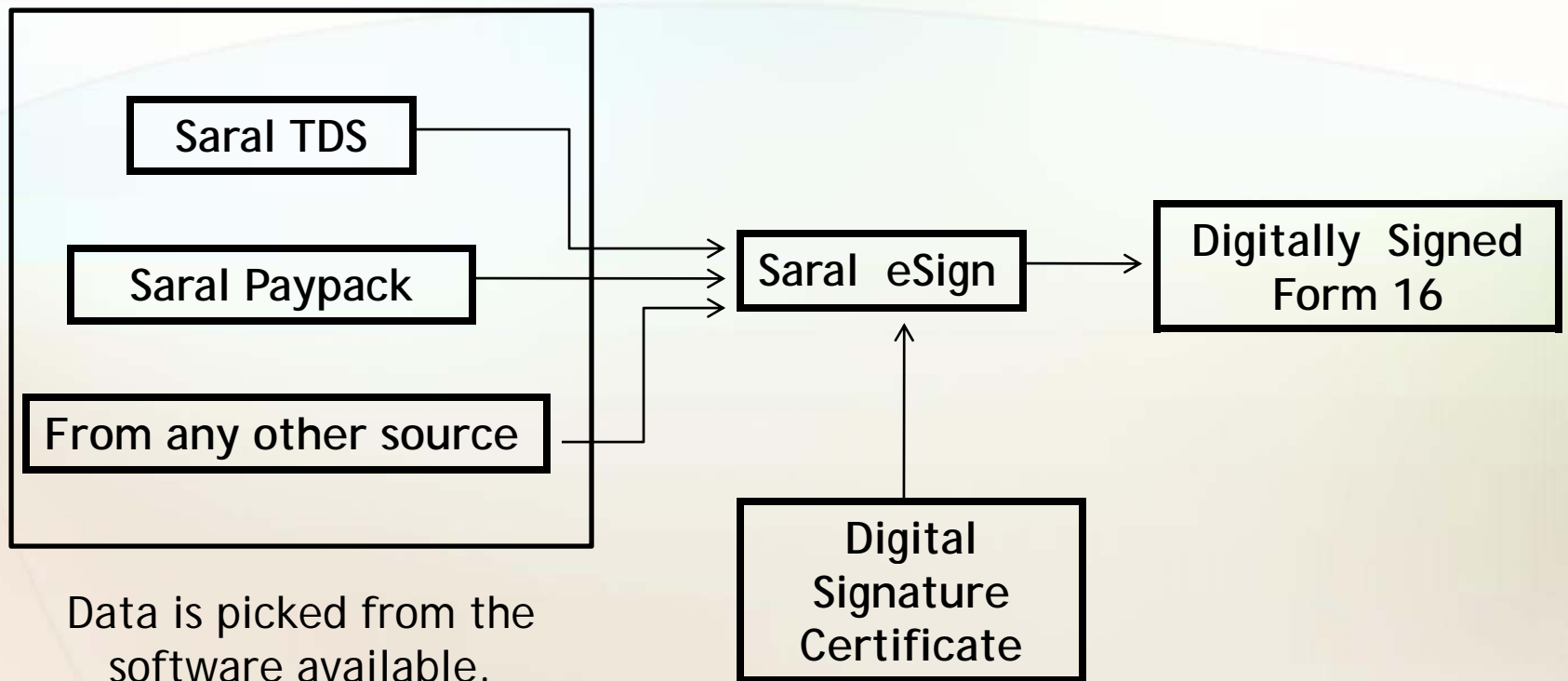
Saral eSign

Note:

- Usually the Interface software by the CA will have the facility to digitally sign documents. But it is obviously a Single Document Signer. Saral eSign has the advantage of Bulk signing of documents with one-time authentication.
- Practically, Other than PDF Documents can also be signed with Digital Signature, but it is an invisible signature method and quite complicated to visualize in different environments. So, Saral eSign generates in state of the art PDF documents.

Saral eSign

Flow of Saral eSign Process



Thank You