Nalsar

November 2022

Agenda

- *Technology & Law-Emerging Areas….An overview of Electronic Contracts, Digital Contracts, E-Banking*
  - *21st November 2022*
- *Technology & Law-Emerging Areas Data protection Law, BIG DATA, Quantum Computing and IOT*
  - *21st November 2022*

Technology & Law-Emerging Areas….

An overview of Electronic Contracts, Digital Contracts, E-Banking

By

Naavi

Technology Developments

Computer technology originated as an efficient Calculator	In the second phase	In the emerging third phase, web is used for “Read”, “Write” and “Execute” and is referred to as web 3.0

• Graduated to a data storage and access system
• Expanded to the Internet system of sharing of information
• Added the communication system of E Mails
• Further expanded to Mobiles
  • Read only web is often referred to as Web1.0
	• Interactivity increased and peer to peer networking for data interchange came into existence
	  • Participative social web is often referred to as web2.0
		• We are moving into the area of “Immersive web” with Google glasses, Meta Verse , Artificial Intelligence, etc

Early laws of Cyber Space

- The first requirement was to provide legal recognition to the activities on the Web
  - ITA 2000 provided the legal recognition
  - Suggested how to determine attribution, time and place of sending and receiving of messages
- For Execution of contracts, it was necessary to design an Electronic signature system
  - ITA 2000 designed the Digital Signature system which became available in 2002
  - Extended to E-Sign in 2016 which is a form of approved authentication using Aadhaar identity
- With legal recognition of electronic documents and a method of authentication, execution of contracts with digital documents became possible
  - Now we speak of Smart Contracts where events are linked to action

Evolution of the Laws

As the Web transformed into Web 2.0 with more interactivity,

- Social Media regulations became necessary

ITA 2000 had some laws applicable to Intermediaries in order to control Cyber Crimes

- Twitter, WhatsApp and FaceBook stretched the laws and challenged the Government
- Government responded with new Intermediary guidelines first in 2011 and now again in 2021-2022.

Laws for Web 3.0, the Metaverse world etc will pose further challenges

- Some of the issues can be handled by proper interpretation of the current laws under ITA 2000.
- To have better clarity, new laws may be required to be enacted
  - Government is trying to amend ITA 2000/8 more substantially to make in contemporary.

Let us explore the laws in ITA 2000/8

Applicable to Digital Contracts

ITA 2000 extended the Law of Contracts in the Indian Contract Act 1872 to the Digital Space

- Section 4 of ITA 2000 stated
  - Legal Recognition of Electronic Records
    - Where any law provides that information or any other matter shall be in writing or in the typewritten or printed form, then,
      - notwithstanding anything contained in such law,
      - such requirement shall be deemed to have been satisfied if such information or matter is
        - (a)rendered or made available in an electronic form; and
        - (b)accessible so as to be usable for a subsequent reference

ITA 2000 however excludes certain documents from its application (As amended on 4th Oct 2022)

- Section 1(4):
  - Nothing in this Act shall apply to documents or transactions specified in the First Schedule by way of addition or deletion of entries thereto
- Schedule lists
  - A negotiable instrument (other than a cheque, a Demand Promissory Note or a Bill of Exchange issued in favour of or endorsed by an entity regulated by the Reserve Bank of India, National Housing Bank, Securities and Exchange Board of India, Insurance Regulatory and Development Authority of India and Pension Fund Regulatory and Development Authority) as defined in section 13 of the Negotiable Instrument Act, 1881 (26 of 1881)
  - A Power of Attorney as defined in section 1A of the Power of Attorney Act 1882 (7 of 1882)“but excluding those power-of attorney that empower an entity regulated by the Reserve Bank of India, National Housing Bank, Securities and Exchange Board of India, Insurance Regulatory and Development Authority of India and Pension Fund Regulatory and Development Authority to act for, on behalf of, and in the name of the person executing them.
  - A trust as defined in section 3 of the Indian Trusts Act, 1882 (2 of 1882)
  - A will as defined in clause (h) of section 2 of the Indian Succession Act, 1925 (39 of 1925) including any testamentary deposition whatever name called

Documents related to transfer of interest in immovable property

- Was excluded in the ITA 2000
- Now in the amendment of October 4, 2022, the exclusion has been removed.
- Some of these documents fall into the category of “Compulsory payment of Stamp Duty”.
  - Requires amendment of Stamp Act in terms of “Cancellation of Stamps”, “Indicating the payment of stamp duty” on the instrument etc

Implications of Stamp Act

- Does E Contract require stamping?
  - Normally E Document is not a document as per Stamp Act
  - Some State Governments like Maharashtra have amended the state Stamp Act to enable charging of Stamp Duty for digital contracts
- With the inclusion of documents related to sale and transfer of title in an immovable property into ITA 2000
  - Payment of Stamp Duty may become permissible now

Understanding the Digital Signature/E Sign

- **Sec-5**
  - Where any law provides that
    - information or any other matter shall be authenticated by affixing the signature or
    - any document should be signed or
    - bear the signature of any person then,
  - notwithstanding anything contained in such law,
    - such requirement shall be deemed to have been satisfied,
    - if such information or matter is authenticated by means of electronic signature affixed in such manner as may be prescribed by the Central Government.
- "electronic signature" means authentication of any electronic record by a subscriber by means of the electronic technique specified in the second schedule and **includes digital signature**
- "Digital Signature" means authentication of any electronic record by a subscriber by means of an electronic method or procedure in accordance with the provisions of section 3;

Authentication of Electronic Documents

- Sec- 3 of ITA-2000 :
    - (1)Subject to the provisions of this section any **subscriber** may authenticate an electronic record by affixing his digital signature.
    - (2)The authentication of the electronic record shall be effected by the use of <u>asymmetric crypto system</u> and <u>hash function</u> which envelop and transform the initial electronic record into another electronic record.
- Section 3A:
    - (1) Notwithstanding anything contained in section 3, but subject to the provisions of sub-section (2),
        - a subscriber may authenticate any electronic record by such electronic signature or electronic authentication technique which-
        - (a) is considered reliable ; and
        - (b) may be specified in the Second Schedule (2)

Electronic Signature System

- Document D to be Digitally signed by X
  - Create a Hash value of D by an approved algorithm
  - Encrypt the Hash Value with the Private Key of a Digital Certificate issued to X by a licensed Certifying authority
    - Encrypted hash value is called the Digital Signature
- Document D to be e-Signed by X
  - Submit D to the Accredited API
  - API contacts a Certifying authority, obtains a temporary digital certificate, creates the hash value of the document, encrypts the hash value with the temporary private key to create a E-Sign.
    - Digital certificate for E Sign is a one time use Certificate valid for 30 minutes only

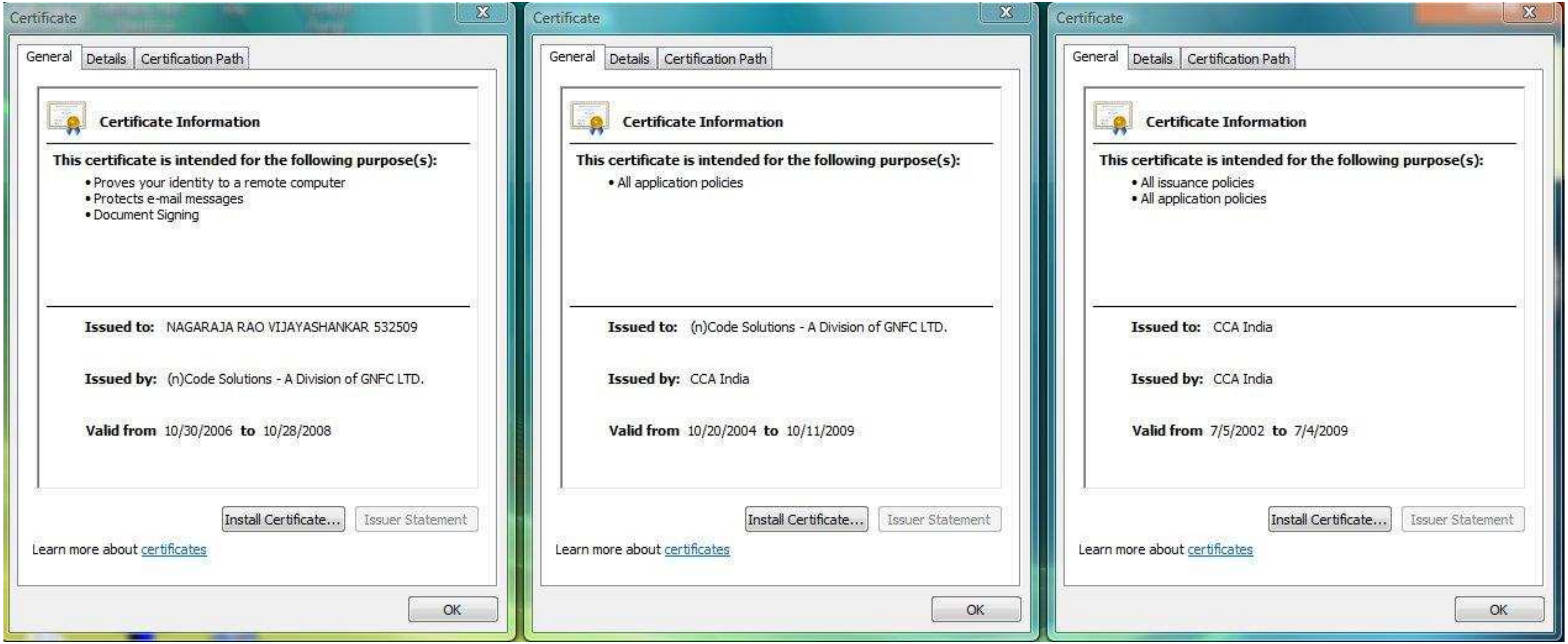
Electronic Signature system

- Digital Signature or E-Sign is a separate document and Document D is a separate Document
  - After obtaining the Digital signature or E Sign, it has to be embedded into the Document so that a Digitally Signed Document can be shared with another person.
- Recipient has to Verify the Digital Signature/E Sign by
  - first decrypting it by a Public Key of the signer and then
  - separately calculating the Hash value of the document received using the same algorithm and then
  - comparing the two hash values which should be same.
- The document exchange system shares the Digital Certificate which contains both the public key of the signer and the information about the algorithms used, name and identity etc.

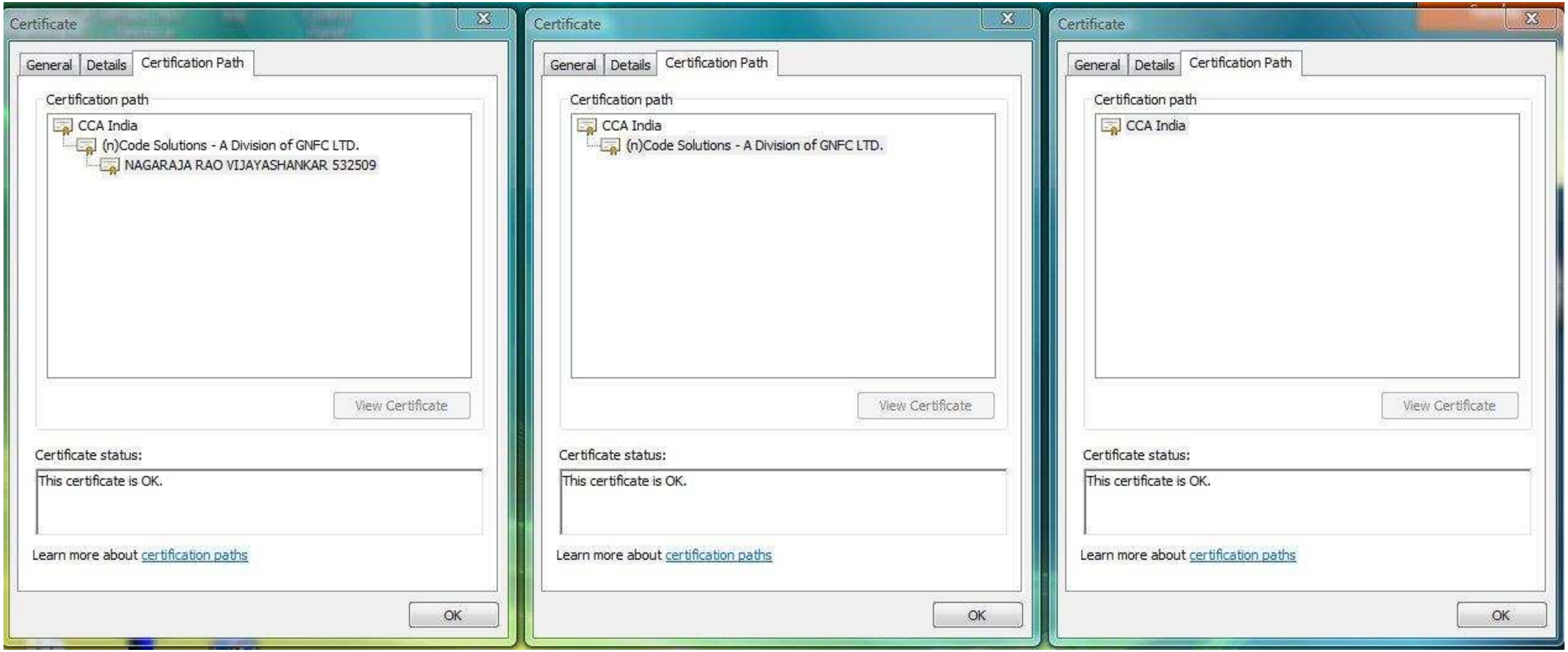
How to view a Digital Signature?

- Digital Signature is an electronic document… a set of binary representation
- What can be viewed and understood is the Digital Certificate
- This is what a digital signature may look like
  - 01001010 01011010 01000010 01000101 01001110 01011000 01110101 01110000 01010101 01110101 01010110 00111000 00111000 01101100 01110100 00110010 01001101 01101100 01110110 01010011 01010101 01000101 01100100 01001100 01001010 01001011 01100001 01110010 01001010 00101011
    - It is document specific and person linked.
    - The digital signature changes if the person changes (Private key changes) or document changes (different document),

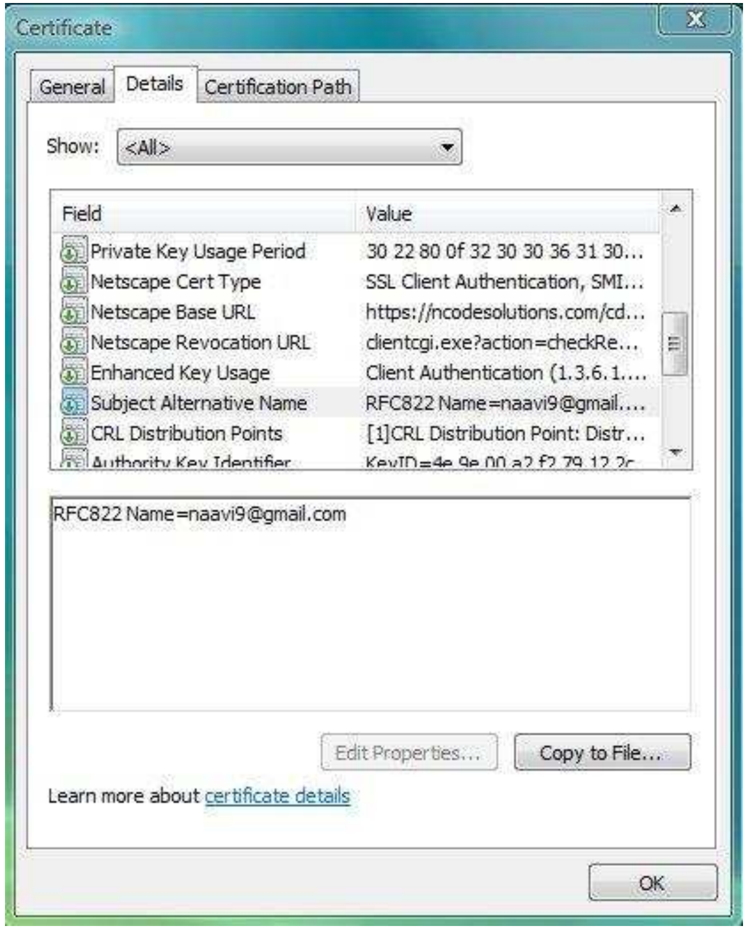
Digital Certificate-View 1-Certifying/Root Certifying Authority

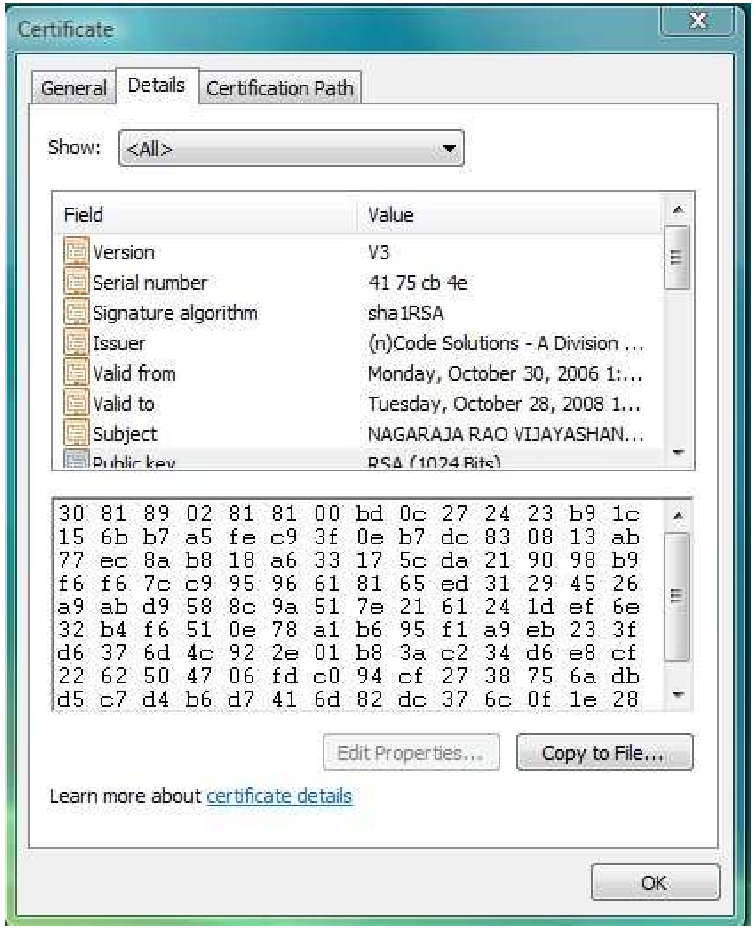


Digital Certificate-View 3



Digital Certificate-View 2





Certifying Authorities (19 entities)

- Licensed by Controller of Certifying Authorities
  - Safescrypt, (n) Code, E Mudhra
  - Capricorn, V Sign, Pantasign, ID sign, ProDigisign, SignX, Xtra Trust
  - IAF, Indian Army, Indian Navy, NSDL, CDAC, IDRBT,B-Governance Services India Ltd, RajComp Info Services Ltd, CDSL Ventures Limited

Basics of Contract Law

What is a Contract?

- A Contract is defined in Indian Contract Act 1872.
- ITA 2000 does not define a “Contract”. It it speaks of several other matters incidental to contract formation and effect.
  - Hence we need to use both Indian Contract Act and ITA 2000/8 to understand the subject of “law of Digital Contracts”.

Legal Definition

- According to Section 2(g) of Indian Contract Act (ICA),
  - A “Contract” is an “Agreement” enforceable in law
- To understand what is a “Contract”,
  - we need to therefore understand what affects the “Enforceability” of a contract as per law

What Agreements are Contracts

- Sec 10 of ICA:
  - Agreements will be enforceable in law if they are made by the
    - free consent of parties
    - competent to contract for a
    - lawful consideration and with a
    - lawful object and are
    - not expressly declared to be void in contract act

Elements of Physical Society Contracts..

- Free Consent
  - No Misrepresentation
  - No Fraud
  - No Coercion
  - No Undue Influence
  - No Mistake of Fact
  - No Mistake of Indian law

Contract through competent parties

- Not a minor
- Not insolvent
- Not insane
  - Can these principles be also applicable to Digital Contracts?
- Contracts through agents
  - permitted

To enforce an agreement

- The parties to the contract should be identified
- The terms should be understood and accepted
- Formation should be recognized in law
- Performance should be verifiable
- Consideration should be verifiable

Contract Formation

- The essence of formation of a contract is
  - An offer document
    - An Acceptance of the offer
  - Often both the offer and acceptance documents may be combined in a single document which is signed by both parties
  - It is also possible that offer and acceptance can be done by a set of documents where one makes an offer, other makes a counter offer and so on until the final version of the offer is accepted without change by the other party which concludes the contract

Definition of Digital Contracts..

- A Digital Contract is therefore commonly defined as
  - A Contract formed with the use of Electronic Documents
    - i.e. Where the terms of contract are written in digital form
    - i.e. the offer document and the acceptance document is in electronic form

Definition of Digital Contracts..

- However in practice we come across certain other contracts where part of the contractual formation is dependent on an electronic document, such as
  - One of either the offer document or acceptance document is in electronic form and the other in paper form.
  - Contract is in paper with both the offer and acceptance being in paper but the performance of the contract is "Electronic" (say creation of a website)
  - Contract is in paper but the payment is in the form of virtual money
- These "Hybrid" contracts also can be called "Digital Contracts" since the laws applicable to electronic documents are relevant to determine the consequences

Definition of Digital Contracts

- We therefore define Digital Contract as
  - Any Agreement Enforceable in law where any one of the contractual elements such as the offer, acceptance, consideration or performance is in Electronic Form

Negotiated and Standard Form Contracts

- Ideally, the terms of a contract are discussed point by point and agreed to by all the parties.
- Some times one of the parties presents what is termed as a “Standard Form Contract” with a “take it or leave it option” to the other party without clause by clause discussion and agreement.
  - Such contracts are called “Standard Form Contracts”

Un-conscionable contract

- When a dominant party to a contract enforces a standard form contract, there is a possibility that the other party may agree and sign the document but without complete mental agreement.
  - In such contracts, if certain clauses are considered blatantly one sided and unfair, the Court can set aside the contract as “Un-Conscionable”
  - Or expect the dominant party to exercise a greater “Disclosure Responsibility” by highlighting onerous clauses and ensure that the other party has agreed to it of his free will.

Oral Contract

- According to ICA, contracts can be “Oral”
  - i.e: Offer and Acceptance can be by spoken words
- In the digital world all electronic documents are like written documents.
- Even an audio or video file is a “Written” Electronic Document.
- Hence contracts formed with Offer and Acceptance being in electronic form are always considered “Written Contracts”

Implied Contracts

- A Contract formation may be recognized without an offer and acceptance document
  - When the actions of the parties indicate that there is an offer and acceptance
    - These are “Implied Contracts” where the behavior of the parties indicate the existence of a Contract

Multiple Party Contracts

- Contracts can be between two or more parties
  - All of them may sign a single document
  - In multi party contracts there would be a mutual agreement of the terms of the contract and there can be a mutual offers and acceptances within the overall contracts

Witnessed Agreements

- Essence of a Contract is a “Meeting of Minds” where the parties agree in paper and in mental intention to do what they agree to do.
  - There is a possibility that the signature might not have been obtained with free consent by coercion etc.
  - Also, when there is a written document there is a possibility that the language of the document is not the natural language of one of the parties and a doubt may be cast on “Meeting of Minds”

Witnessed Agreements

- A remedy to establish “Meeting of Minds” is to witness the document with an effective statement from the witness to the effect
  - I witness to the fact that the signatories have signed in my presence
  - The contents of the document have been read out to the signatory and explained in the language he understands and he has understood it before signing

Validity of contracts formed through electronic means

- Section 10A of ITA 2008
  - Where in a contract formation,
    - the communication of proposals,
    - the acceptance of proposals,
    - the revocation of proposals and acceptances,
      - as the case may be,
      - are expressed in electronic form or by means of an electronic record,
        - such contract <u>shall not be deemed to be unenforceable</u> solely on the ground that such electronic form or means was used for that purpose.

Does this mean…

- Hybrid Contracts (where one of the document is in electronic form and the other is in paper form) can be denied recognition
  - Under both ICA 1872 and
  - ITA 2008
- This is a matter that may come up for judicial scrutiny on a later day.
  - Our definition of Digital Contract is inclusive of hybrid documents

Attribution

- Sec 11
  - **Attribution of Electronic Records**
    - An electronic record shall be attributed to the originator
      - (a)if it was sent by the originator himself;
        - (b)by a person who had the authority to act on behalf of the originator in respect of that electronic record; or
        - (c)by an information system programmed by or on behalf of the originator to operate automatically

Acknowledgement (Sec 12)

- Where the originator **has not stipulated** that
  - the acknowledgment of receipt of electronic record be given in a particular form or by a particular method, an acknowledgment may be given by -
  - (a) any communication by the addressee, automated or otherwise; or
  - (b)any conduct of the addressee, sufficient to indicate to the originator that the electronic record has been received.
    - i.e., **Implied digital contracts** are recognized

Acknowledgement (Sec 12)

- Where the originator **has stipulated** that
  - the electronic record shall **be binding only on receipt of an acknowledgment**
  - then **unless acknowledgment has been so received,** the electronic record shall be deemed to have been **never sent** by the originator.
- Where the originator **has not stipulated** that acknowledgement is essential or acknowledgement **has not been issued** by the other party within a reasonable time
  - Originator after a reasonable time, can by giving a notice, rescind his message and contract.

Time and Place of Contract

Determined by the completion of Contractual obligations or as otherwise specified

Prerequisite for digital contract

- Contracting parties should normally designate the e-mail address (identity of the Communication device) for contact
  - Sending and Receiving of messages will be with reference to such designated addresses

Time Of Despatch [sec 13(1)]

- Save as otherwise agreed to between the originator and the addressee,
- the **dispatch** of an electronic record occurs when it enters a computer **resource outside** the control of the originator.
  - Ed: i.e., when it leaves the resource under the control of the sender

Time Of Receipt [Sec 13(2)]

- Save as otherwise agreed between the originator and the addressee,
- the time of receipt of an electronic record shall be determined as follows, namely –
  - (a)if the addressee **has designated** a computer resource for the purpose of receiving electronic records
    - (i)receipt occurs at the time when the electronic record enters the designated computer resource; or
    - (ii)if the electronic record is sent to a computer resource of the addressee that is not the designated computer resource, receipt occurs at the time when the electronic **record is retrieved** by the addressee;
  - (b)if the addressee **has not designated** a computer resource along with specified timings, if any, receipt occurs when the electronic record **enters** the computer resource of the addressee.

Place of Despatch [Sec 13(3)]

- Save as otherwise agreed between the originator and the addressee,
- an electronic record is
  - deemed to "be dispatched at the place where the **originator has his place of business,** and is
  - deemed to be received at the place where the **addressee has his place of business**.

Place of Despatch [Sec 13 (4)]

- The provisions of sub-section (2) shall apply notwithstanding that
- the place where the computer resource is **located** may be **different** from the place where the electronic record is **deemed to have been rec**eived under sub-section (3).

Place of Despatch [Sec 13 (5)]

- For the purposes of this section -
- (a)if the originator or the addressee has more than one place of business, the **principal place of business** shall be the place of business;
- (b)if the originator or the addressee **does not have a place of business**, his usual place of **residence** shall be deemed to be the place of business;
- (c)"Usual Place of Residence", in relation to a body corporate, means the place where it is **registered**.

Some Cases on Standard Form Contracts

..in India

Lilly White vs R. Munuswami on 11/12/1964

- On the reverse of the bill, which is generally handed over by the firm to customers when receiving articles for dry-cleaning, certain conditions are printed.
  - the learned Judge observed that the condition "is not enforceable on public grounds…"

Lilly White vs R. Munuswami on 11/12/1964

- The judgement observed
  - “It appears to me to be very clear that a term which is prima facie opposed both to public policy and to the fundamental principles of the law of contract, cannot be enforced by a court, merely, because it is printed on the reverse of a bill and there is a tacit acceptance of the term when the bill was received by the customer.”

LIC of India v. C.E.R.C., (1995) 5 SCC 482

- “It is, therefore, the settled law that if a contract or a clause in a contract is found unreasonable or unfair or irrational one must look to the relative bargaining power of the contracting parties.
- In dotted line contracts there would be no occasion for a weaker party to bargain or to assume to have equal bargaining power.
- He has either to accept or leave the services or goods in terms of the dotted line contract.
- His option would be either to accept the unreasonable or unfair terms or forego the service forever.
- With a view to have the services of the goods, the party enters into a contract with unreasonable or unfair terms contained therein and he would be left with no option but to sign the contract.”

Lessons to be drawn from the cases..

- In a web based contract it is essential that the terms have to be reasonable and onerous clauses if any have to be sufficiently highlighted so that it does not escape the attention of the user
  - Requiring the user to tick a box or enter a word such as “yes” is therefore considered a better affirmative action than just clicking on a button “I AGREE” to bring the terms of contract to the notice of the user
  - Sending an acknowledgement by e-mail confirming the contract or
  - Treating the published terms as only “An Offer to Accept” and conclude acceptance by an e-mail are considered better options for web site business to enforce the terms.

The Case of Rejected Shapoorji Pallonji E-Tender

- Tender documents filed but final submission button not pressed
- NIC rejected the tender
- Party Contested stating that document submitted should be sufficient and clicking the final submission button was because it did not appear.
- No Evidence was produced for the error if any in the system.
  - It was a prequalification rejection and on that pretext Mumbai High Court allowed the acceptance of the tender.

Nabha Power Ltd Vs Punjab State Power Corporation Ltd (SC-Civil Appeal 179 of 2017

- **Normally a contract should be read as it reads, as per its express terms**.
- Implied terms is a concept, which is necessitated only when the following 5 point test comes into play.
  - Interpretation should be reasonable and equitable
  - Necessary to give business efficacy to the contract
  - Meet the officious Bystander Test *
  - Capable of clear expression
  - Must not contradict any express terms of the contract

(Officacious Bystander Test: A suggested approach to imagine a nosey, officious bystander walking past two contracting parties and asking them whether they would want to put some express term into the agreement. If the parties would instantly retort that such a term is "of course" already mutually part of the agreement then it is apt for implication)

The Case of S Umashankar Vs ICICI Bank

- Phishing case contested by the Bank on the strength of the Internet Banking contract
  - Challenged for being not part of the Account Opening Contract
  - Not digitally signed by customer
  - Changed during the custody of one party without concurrence
  - E Mails not digitally signed
  - E Mail identity of the Bank not consistent

Need to Preserve Evidence

Change in terms

- It is possible that some times "Presumption" can also be drawn from an existing document.
  - i.e. a customer of a web service may try to hold the published terms against the web site owner though the document is not binding on himself
  - In such cases, there is a need to preserve evidence and present it in a manner acceptable to a court of law.
    - Evidentiary aspects will be discussed in detail in subsequent lessons
      - Web based evidence may be preserved by using services such as www.cean.in

Shrink Wrap Contract

- When software is distributed on a media,
  - the media is the hardware that is sold.
- But the content of the media which includes the software with a certain functionality that the user is looking for
  - may not be sold but only licensed
    - Such sales are done through what are called “Shrink-Wrap Contracts”

What is a Shrink Wrap Contract?

- The term “Shrink Wrap Contract” comes from the fact that when a software is sold on a CD, the CD is often shrink wrapped with the condition that
  - If the shrink wrap is opened, the CD is deemed to have been irrevocably sold
- The outer cover of the CD may contain a few points which are part of the contract but not the full terms.
- The full terms would be available only when the CD is run on the computer and contents seen.
- The user’s purchase decision is to be made only on viewing the cover and he is deemed to have accepted the terms which may be later revealed when he runs the CD
  - Such contracts in which only part of the contract terms are available to an acceptor before he irrevocably takes a decision to accept are called Shrink Wrap Contracts

Not the same as Click Wrap Contract

- Click Wrap contracts are those where the acceptor clicks on “I Agree”
  - Where the full particulars are available

Thank You

naavi@naavi.org

www.naavi.org

+919343554943

CYBER LAW GURU

Android App