



Public Key Infrastructure (PKI)

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Courtesy by	
Mr. M J Chandrani & Mr. Dwiren Kantharia	
(n)Code Solutions GNFC, Ahmedabad	

Editorial Team	
Neeta Shah Amrish Panchal	

Incorporated on 10 May, 1976 as a joint sector company by Government of Gujarat and Gujarat State Fertilizers Company Limited is having single-stream Ammonia-Urea plant. 1985 onwards GNFC has been active in a major diversification into industrial chemicals. GNFC Infotower, a 1,55,000 Sq. Ft. set-up to provide all facilities required by IT companies under one roof, is also a hub for major BPO ventures of reputed groups.

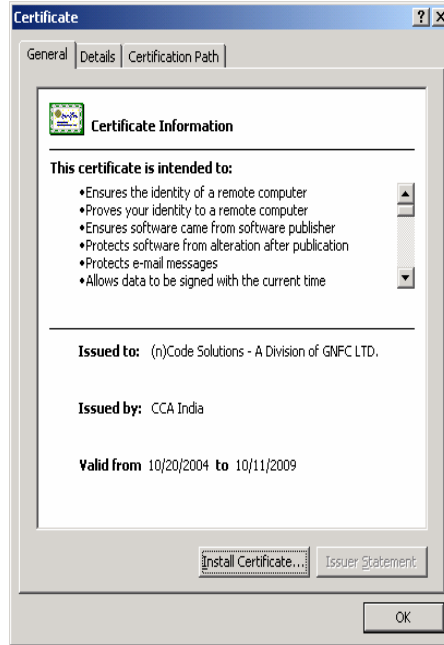


(n)Code Solutions CA

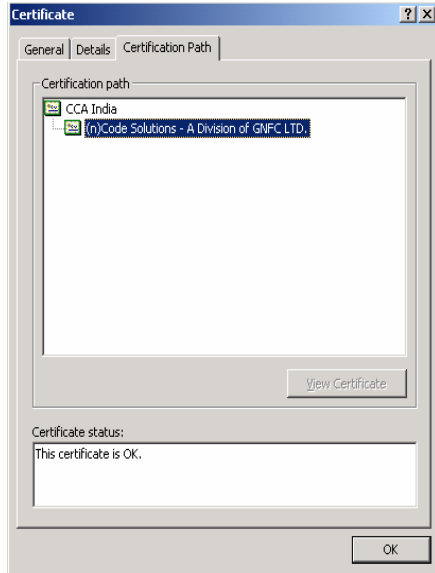
GNFC has promoted **(n)Code Solutions CA** as a division of the company to set up a world class Public Key Infrastructure (PKI) for issuance and management of Digital Signature Certificate as per the Indian IT Act 2000. This infrastructure, located at GNFC Infotower Ahmedabad, is an ultra modern and ultra secure facility. It has been designed to work for 24 hours, 365 days a year, using world's best technologies to manage and run its operations.

GNFC has been awarded the commercial **Certifying Authority License** from the Controller of Certifying Authorities, Ministry of Information Technology for the issuance and management of Digital Signature Certificates under the Indian cyber law. The award of license is an important milestone in progress of GNFC and Gujarat as well, making it the **1st commercial Certifying Authority in Gujarat**. The license has been awarded to **(n)Code Solutions** - a division of Gujarat Narmada Valley Fertilizers Company Limited expressly for carrying out commercial Certifying Authority business. The Digital Certificates to be

issued by (n)Code Solutions can be used by all the Indian citizens, government bodies, banks, private organizations and others.



(n)Code Solutions CA Certificate Details



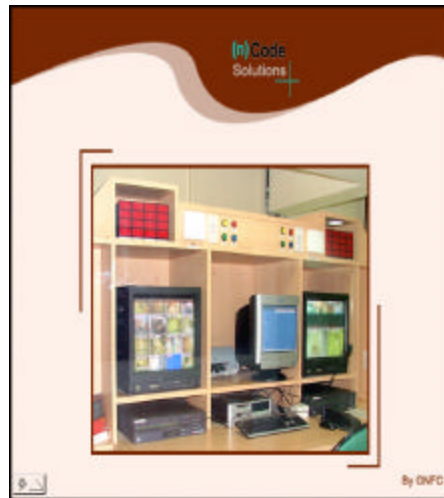
Trust Path

Tie-up with Entrust Inc.

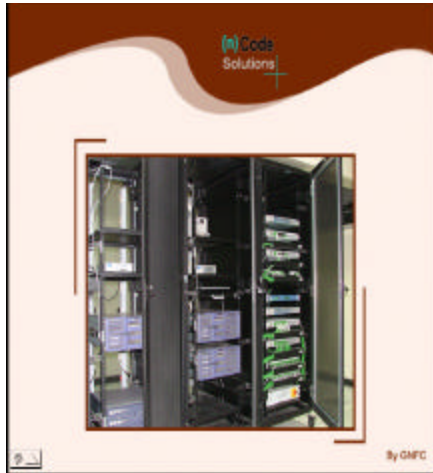
GNFC has tied up with Entrust inc. a leader in PKI technology with operations across globe. Entrust runs numerous PKI enabled applications in various government and business organizations worldwide like FBI, Government of Canada, Chase Manhattan Bank, Compaq, Novartis etc. CriticalPath, nCipher, Veritas, HP and Sun provide other technology components.

DATA Center:

GNFC's Certifying Authority infrastructure is a state-of-the-art, world-class PKI infrastructure designed to stringent international standards, capable of handling millions of users. The infrastructure is manned by trained security personals on 24*7*365 basis with CCTV and Bio Metric access in place. Total set up is highly secure and trustworthy, which is a benchmark in the industry. The PKI infrastructure is IT Act 2000 compliant.



GNFC Data Center



GNFC Data Center



GNFC Data Center

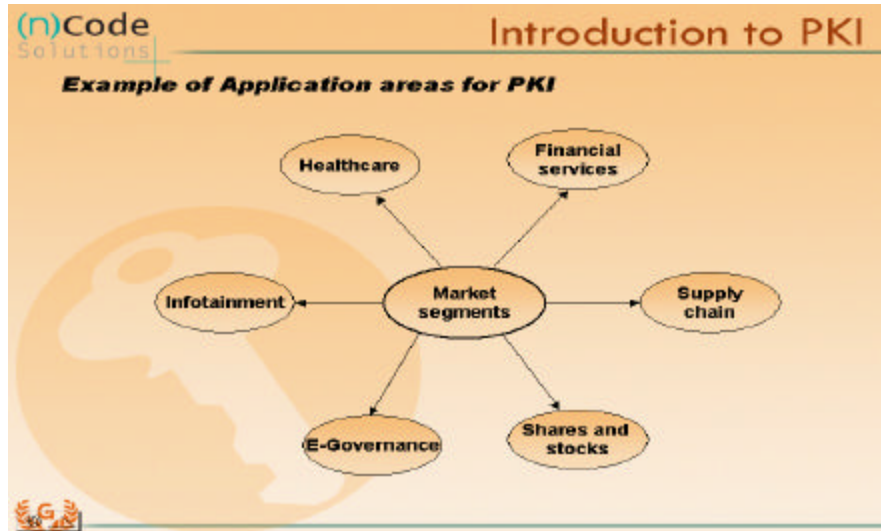
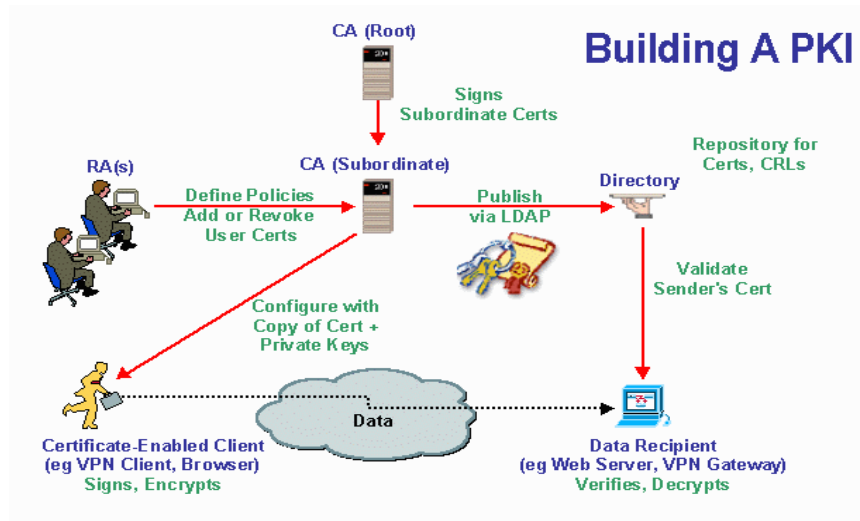
Security Validation

The information Technology Act, 2000 provides the required legal sanctity to Digital Signatures based on asymmetric crypto systems and issued by the licensed Certifying Authority like (n)Code Solutions. The Digital Signatures are accepted at par with handwritten signatures and the digitally signed electronic documents are treated at par with paper documents. The Act provides the basic legal and administrative framework for e-commerce and promotes its growth by creating trust in the electronic environment.

Usage of Digital Certificate and Digital Signature

The Digital Certificates find usage in electronic transactions wherever there is need for any or more of the following:

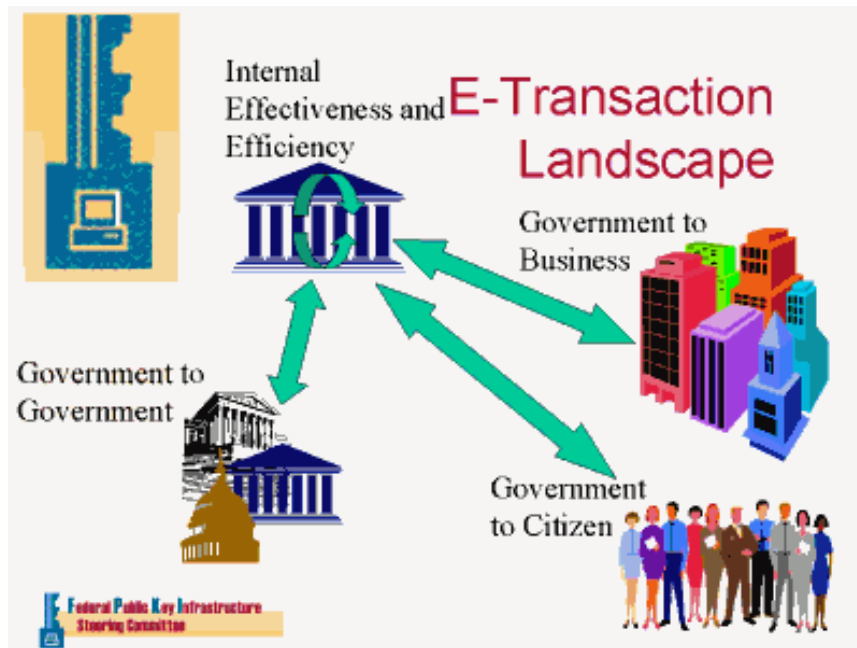
1. Identification/Authentication- The need to identify the transacting parties
2. Confidentiality-The communication should remain private
3. Message/transaction integrity-The message should not be tempered with
4. Non-repudiation –The message or transaction is legally binding



Application Area of PKI and Other Services

Application Area of PKI and Other Services

- (n)Code Solutions shall be able to provide **Digital Signature Certificates** for B2B and B2C e-commerce, e-governance, finance, banking and enterprise applications along with a host of applications for different segments and industry verticals.
- (n)Code Solutions also offers
 - application integration so that Digital Signature Certificates can be used into applications ranging from E-mail to intranets, VPNs, ERP systems or any other customer's application.
 - Other professional services offered are Vulnerability and Risk assessment, Security Policy design and implementation, Security Audit, BS 7799 compliance, network penetration Test etc.





Digital Certificate can be used for the following services

- Secure e-Mail
- Secure Work Flow applications
- Online Bill payment
- Online Banking
- Insurance Premium Payment
- E-Tendering
- Supply Chain Management
- Online Share Trading
- Issuance of Forms and Licenses
- SSL enabled portals
- Mobile Banking
- Secure Intranet / Extranet

Readily available applications with (n)Code Solutions

❖ (n)Sign

(n)Sign is a PKI enabled application, which helps delivering Digitally Signed documents to clients via email. It is highly scalable and maintains different logs of activities for future audit purpose.

(n)Sign can work with any database at back end.

❖ (n)Procure

This is a PKI enabled web based end-to-end procurement solution which helps an organization in managing its procurement activities right from raising internal indent to placement of order. Organizations can save processing time and operational costs, and bring transparency in the procurement process. Various MIS reports can be generated using this application.

The web-based application is developed using ASP and it can work with any database.

For more information please visit www.nprocure.com (listed in Web corner)

❖ (n)Billing

This is a PKI enabled web based application which helps in generating the bills, Digitally signing them and sending them across to client via e-mail. Client can verify the bill at his end for authenticating the source and for the integrity of the bill and than can pay the bill online. This application can be useful where there is regular bill generation such as electricity bill, telephone bill, government tax bill etc.



This application is web based and is developed using ASP and can work with different databases.

❖ Form Signing

This is a PKI enabled web based application which helps in submission of Digitally Signed forms. This can be used for managing client interaction such as online application, grievance handling, information sharing, online payment etc. This can be useful in areas such as e-Governance where large numbers of forms need to be handled and authentication of the applicant is required.

This application is web based and is developed using ASP and can work with any database.

Role in the e-Governance

Applications

Digital Certificates have particular appeal for the e-Governance applications, some of which could be:

✓ E-Tendering and e-Procurement: This application reduces the cost of purchases, administrative work and

✓ related costs, speeds up the process and makes the process of buying more transparent.

✓ Online Form Filing: All kinds of applications (requests) to the government can be made online, reducing the burden on citizens and making administration easier. The cost of form processing can be reduced substantially. Also tempering with the forms, loss of forms and corruption can be eliminated.

✓ The Income Tax Department has begun to accept digitally signed electronic returns which shall save huge costs and smoothen the working of the department.

✓ Online Bill Payments: Government taxes and bills can be paid online improving the cash flow and the collections. Property taxes, sales tax and other taxes can be collected online. DGFT and Customs department have already started such initiatives at an all India level.



- ✓ Internal Administrative Reforms: Several applications like workflow (file movement), leave applications, voucher clearance etc can be made electronic; saving costs and improving the administration. Treasury operations can be made much easier and smoother using Digital Certificates.

Portable Accessories.

(n)Code Solutions Digital Certificates can be downloaded on your PC or on a USB Token or a Smart Card.

USB Token: It acts like your portable private Key. It goes wherever you go. More mobile, more secure.



Smart Card: It stores the holder's private key. The Smart Card can also be personalized to work as a proof of identity.

Governance News

"Year of Scientific Awareness – 2004" programme at GUJCOST

A state level training programme and science communicators workshop was organized by Gujarat Council on Science & Technology, Department of Science & Technology, Govt. of Gujarat under the "Year of Scientific Awareness - 2004" programme of department of Science & Technology, Govt. of India at Gujarat JalSeva Training Institute, Sector-15, Gandhinagar on 13-12-2004. Shri J.N. Singh, Secretary, Department of Science & Technology inaugurated the programme. Dr. J.M. Barot, Former Director, JalSeva Training centre & W.H.O. consultant gave encouraging lectures as being a Guest of Honour. Shri Vagmin Buch, Additional Secretary and Shri Jayendra Modi, Joint secretary delivered occasional speech. The whole program was well organized by Dr. A. M. Prabhakar, Advisor & Member Secretary, GUJCOST. In the Programme Multimedia Demonstration of IT for school children was also conducted. Food adulteration identification program was also demonstrated. Multimedia projector, CD Sets, Quiz Monitor, Book sets, "Man ki Dunia" books were distributed to community science centers by the secretary.

The workshop was aimed to popularize science awareness in the state of Gujarat. Shri Manish Rathod, Administrative Officer, GUJCOST explained about the program & the objectives of the workshops. Shri Amit Shah, Shri Chirag Chaudhary, Shri Anil Patel etc. of GUJCOST demonstrated various kits.

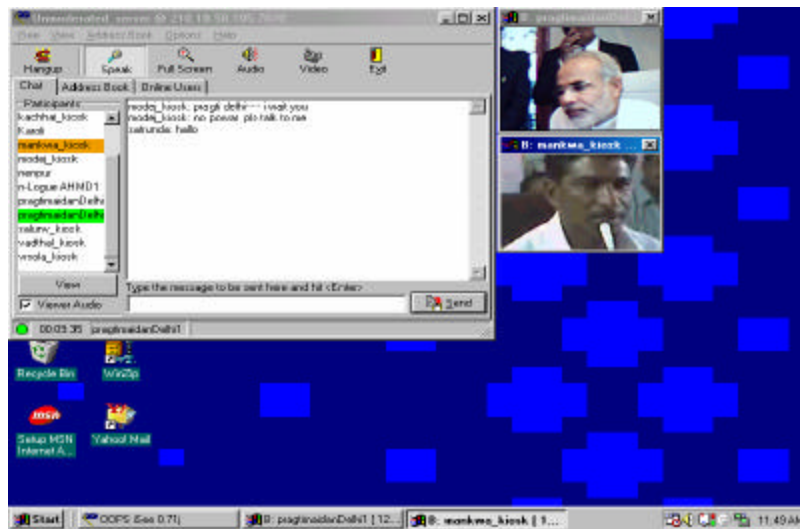
The program was nicely presented by Prof. R.G. Motwani, Principal Scientific Officer, GUJCOST

Live Video Conferencing at IITF 2004, New Delhi

India International Trade Fair (IITF) 2004 was organized during November 14-27, 2004 at Pragati Maidan, New Delhi. On 19th November, 2004 a Gujarat Day was celebrated at IITF, New Delhi.

A live demonstration of video-conferencing of Gyan Ganga (Rural Connectivity) project was kept on 19th November 2004 at IITF, New Delhi. Earlier, two newsletters regarding the Gyan Ganga project were published on our website, which is available on <http://newsletter.gujarat.gov.in>.

In the photograph inserted on the following page, it can be seen that Hon'ble CM of Gujarat sitting in the Gujarat Pavilion at IITF, New Delhi is doing live video-conferencing with a villager sitting at Mankwa village kiosk in Gujarat.



**Live Video-conferencing at IITF, New Delhi
Hon'ble CM of Gujarat with a villager of Gujarat**



Web Corner

Controller of Certifying Authority, MIT, India
www.cca.gov.in

(n)Code Solutions
www.ncodesolutions.com

PKI enabled web based end-to-end
procurement solution
www.nprocure.com

Please look out for this section for URLs of
Government websites

*For electronic subscription to the
bulletin, please email us with your email
address at:*

webmaster@gujaratinformatics.com

OR

neetas@gujarat.gov.in

visit us at:

www.gujaratinformatics.com

Contact Address:
Gujarat Informatics Ltd.
Block No. 1, 8th Floor,
Udyog Bhavan,
Gandhinagar – 382017
Phone: 079 – 23256022
Fax: 079 – 23238925
