GOVERNMENT

CASE STUDY

Andhra Pradesh Government goes Paperless using Digital Signatures

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Legally Valid Digital Signatures help Government of AP go paperless, reduce cost and provide transparency and convenience

Industry
Government

eGovernance initiative

The Government of Andhra Pradesh recognized the need to modernize all its Departments through technology initiatives. As part of the initiative, efforts are being made to completely digitize and go paperless in all functions. This includes leave management system, Tour management system, Document management system, Personnel information management systems etc.

Business Need

Government of AP wanted to bring in more effective, efficient and transparent inter and intra government process by eliminating delays in decision making thereby saving time and ensuring more responsibility and transparency in administration.

Approach

To have an integrated solution that addresses the following:

- Shorten time period in decision making

- To make availability of data/information anytime and anywhere

- To bring in accountability, quality and authenticity of all the activities carried out

- To bring a wet signature equivalent on the digital document by using legally valid digital signatures

- To bring in consistency in the overall process followed
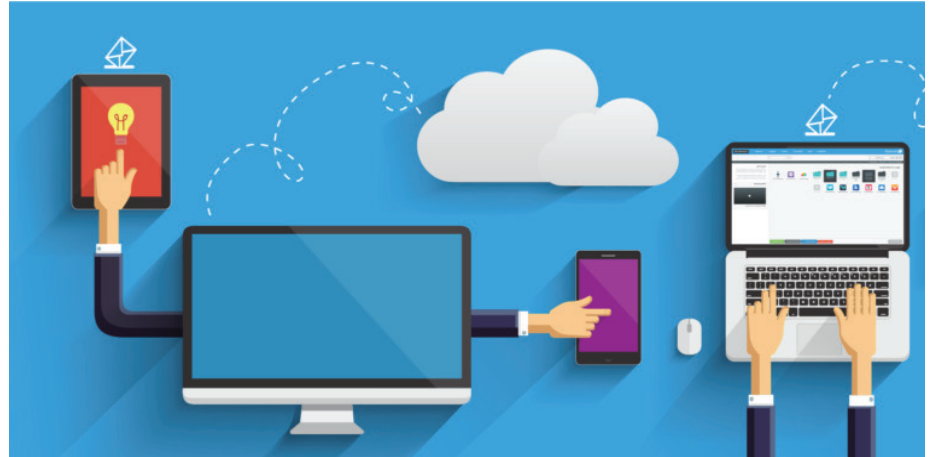
Background

The Government of Andhra Pradesh has been following paper based administration of its internal office resulting in voluminous paper flow. For any activity to be carried out such as leave request, tour request, citizen services, projects related approval, Notification, office orders etc., requires paper and also approvals at various levels of the organisation structure including multi departmental approvals. For any approval, the physical file needs to move from one level to another level in the hierarchy of the concerned department and also if required, the physical file needs to move to various departments for approvals. The physical movement of files from one place to another place along with the availability of authorized signatory had become a bottleneck to create efficient administration.

This resulted in multiple challenges namely

- Large piles of files pending for approvals thus resulting in delay in project clearance

- Increased turnaround time on account of high volume and physical processing

- Lack of quick and transparent access to historical data

- Increased real estate cost for storage and archival of records

To fast track the process and service delivery mechanism, the Government of Andhra Pradesh opted to implement the eOffice. eOffice has various modules such as, simplified, accountable and transparent electronic system like eFile, An Enterprise Document Management System, KMS and also leave and tour management systems. This will completely eliminate physical paper movement.

To make the system more trustworthy and assign accountability for the activities performed on the system, legally valid digital signatures have been introduced.

Digital Signature Technology

The Digital Signature Technology works on the Public Key Infrastructure framework which uses a Cryptographic Key Pair – Private and Public Key for secure access and transmission of Information.

The Public Key Infrastructure framework is prescribed in a model law provided by UNCITRAL (A United Nations body) for International Trade and Commerce

Benefits

Today the Government of Andhra Pradesh has reaped significant benefits by implementing digital signature based eOffice application. These include:

- Ensuring document integrity
- Reducing process delays
- Eliminating the use of papers and printers thus saving cost
- Approvals from anywhere and anytime
- Faster turnaround time in decision making
- Meeting compliance & regulatory requirements
- Going green and reducing carbon footprint in line with the vision of the Country

Solution

eMudhra being a Licensed Certifying Authority in India and a PKI Solution provider issues Digital Signatures to various officers across Government departments in all districts of the state. eMudhra issues legally valid digital signatures through the Government's IT wing i.e. Andhra Pradesh Technology Service (APTS). eMudhra has created a SubCA for the Government of Andhra Pradesh and using this SubCA root certificate, end entity certificates are issued. The officers use digital signature certificates issued by eMudhra at various levels in the eOffice application. These include:

- Log in authentication
- Document signing
- Online requests and approvals

Following are few areas wherein digital signatures are being used by Government Officials:

E-Leave

- User logs into the system using Digital Signatures
- Fills in relevant details for leave by Digitally Signing the request
- Reporting Manager logs into the E-Leave system using Digital Signature to view pending requests
- Pending requests are again approved using Digital Signatures and a Notification is sent to the originator
- Audit logs are maintained to trace the originator, approver and activities performed on the system

E-Filing

- User logs into the system using Digital Signatures
- Scans the document to the e-Office System and enters meta data based on which a diary number is created
- Creates a new e-File, enters meta data based on which system creates a new e-File number
- Opens e-File, notes, creates, approves and issues drafts
- Digitally signs e-File and sends to the next user
- Subsequent users can make their notings using Digital Signature until the file reaches the last channel and then gets saved in the system

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About eMudhra

eMudhra is a global digital identity and leading trust service provider with a focus on Digital Transformation and Cybersecurity initiatives. Through its headquarters in Bangalore, India and offices in Singapore, Dubai and USA, eMudhra works with over 400 large Enterprises including 45 Banks to deploy proprietary solutions for eSignatures, Public Key infrastructure, Predictive Analytics and Blockchain across the globe.

eMudhra is a licensed Certifying Authority under Ministry of Information Technology, India and has issued digital signatures to over 40mn customers in India. eMudhra is a key partner in several Digital India initiatives and is the first eSign service provider. eMudhra also holds the Vice chairmanship of Asia PKI Consortium, Chairmanship of the India PKI Consortium, and is a member of the UN council on Blockchain. At eMudhra, innovation is one of our core principles and our product development efforts are towards building cutting edge IP that can accelerate the world's transition to a secure integrated digital society.