

TRAINING MANUAL

For ECT 10_2022



ECT 10_2022

Programme for technical staff of the High Court of Kerala-hardware & software maintenance, data replication, data monitoring, Video Conferencing equipment and LAN connections.

Kerala Judicial Academy

High Court of Kerala



ECT 10_2022

Training programme for technical staff of the High Court of Kerala-Hardware & Software maintenance, Data replication, Data monitoring, VC equipment & LAN connections

ECT_10_2022 Syllabus _____	2
1. CIS,eFiling,NJDG,JUSTIS - Sri. Rajith K.P., Solution Architect, NIC _____	5
2. ICJS - Smt. Lissy George, Technical Director, NIC _____	42
3. Efiling, Epay and Paperless Courts - Sri. Rajith K.P., Solution Architect, NIC _____	59
4. NSTEP - Smt. Jayasree Suresh, Technical Director, NIC _____	85
4.1. NSTEP Standard Operating Procedures _____	130
5. Server Administration Database Administration Monitoring & Data Replication I and II - Sri. Ajith Varghese, NIC _____	132
6. Working and management of VMWare - Sri. John Paul, CPC team _____	170
7. Programming concepts and PHP - Sri. Rajith K.P., Solution Architect, NIC _____	179
8. Networking -Sri. Praveen S., District System Administrator, Kollam _____	200
9. Data Management and Security - Sri. Rajith K.P, Solution Architect, NIC & Sri. Tejas Udayan, Assistant, High Court of Kerala .	232
10. IT hardware Management - Sri. Robin Kuruvila, EDP Officer, High Court and Sri. Chinthu Simon, EDP Officer, High Court _____	247
11. Digitisation -Sri. Raphy Shahul, Assistant Section Officer, High Court of Kerala _____	278

ECT_10_2022 - Syllabus

Sl. No.	Time (minutes)	Main Topic	Sub Topics
1.	20	Orientation	<ul style="list-style-type: none"> • Introduction of Trainers • Focus of training • Change Management • Need for training
2.	40	Application Software Management I	<ul style="list-style-type: none"> • Fundamentals, architecture, management, optimisation & troubleshooting of • CMS Efiling • Overview of eFiling module and its various tools • Troubleshooting on eFiling. • Epay • Paperless courts
3.	30	Application Software Management II	<ul style="list-style-type: none"> • Fundamentals, architecture, management, optimisation & troubleshooting of • NJDG • JUSTIS • ICJS • Other softwares
4.	45	Server Administration	<ul style="list-style-type: none"> • Best practices in maintenance and monitoring of Servers. • Working and management of VMWare. • Handling BIOS of Rack Server / Pedestal Server. • Server administration and server service related logs – Remote server access (configuring wakeup LAN, enabling ssh etc. related basic commands) • Web server configuration in Windows and UBUNTU. • FTP Server Configuration • Backup Policy of Application and Database Servers. • High Court Convergence Infrastructure(HCI)
5.	15	OS Installation & Configuration	<ul style="list-style-type: none"> • To make a bootable pendrive in UEFI (Unified Extensible Firmware Interface) mode. • Installation of UBUNTU 16.04 Server OS and post

Sl. No.	Time (minutes)	Main Topic	Sub Topics
			configuration of OS in the Rack / Pedestal Server.
6.	20	Database Administration, Monitoring & Data Replication I	<ul style="list-style-type: none"> • Basic configuration of POSTGRESQL and its interface tool like PgAdmin4 and PhpPgAdmin in Windows and UBUNTU • Taking Backup and restoring the backup of Postgresql database in Windows and UBUNTU
7.	40	Database Administration, Monitoring & Data Replication-II	<ul style="list-style-type: none"> • Configuring auto incremental backup in a parallel server. • SLONE configuration for Data Replication. • Judgment/Orders uploading to NDC servers
8.	30	Programming Concepts	<ul style="list-style-type: none"> • Programming Language : JAVA, Android, PHP • Framework : PHP Framework (CakePHP, Laravel, Zend etc.) • Technology : Web Service, AngularJS, Spring, JSON etc.
9.	40	Network Administration & Security	<ul style="list-style-type: none"> • Network administration: configuring Manageable Switch/Router, Port Management, MAC binding etc • Working of Firewall • Making different rules in the firewall. • Overview of Server security, Network security to avoid any cyber attack & Security. • LAN & WAN Connections management • Internet data flow management & optimisation
10.	30	Data Management & Security	<ul style="list-style-type: none"> • Importance of data management • Data fidelity & privacy management • Challenges to manage High Court Network Security • Cyber Threats-Data and

Sl. No.	Time (minutes)	Main Topic	Sub Topics
			Network Security. <ul style="list-style-type: none"> • Website management
11.	30	Hardware Management and Maintenance	<ul style="list-style-type: none"> • Need for optimisation in utilisation of hardware resources • Data management regarding available hardware resources • Computers • Printers • VC equipment • Working in Video conferencing like VIDYO, CISCO. • Other peripherals • Digital Display boards
12.	10	Digitisation of Court Records	<ul style="list-style-type: none"> • Importance of digitisation • Digitisation workflow, management & usage. • Different types of records • Meta data • Digitisation SOP
13.	10	Discussion & doubts	

Case Management through CIS

(Case Information system)

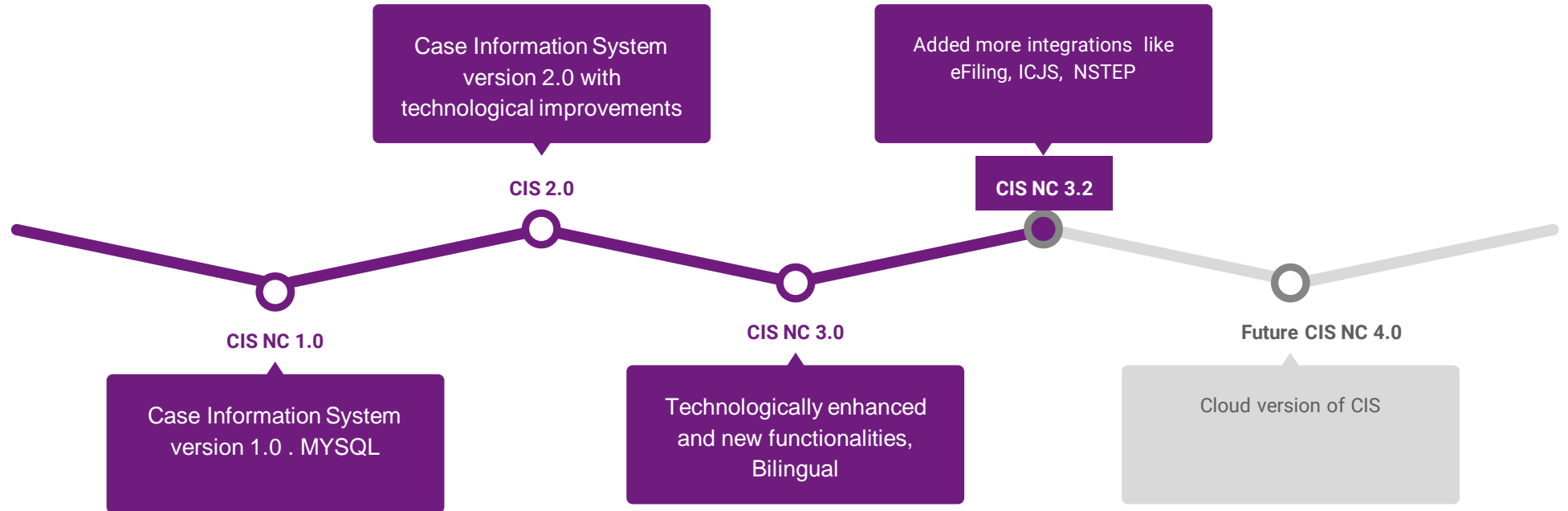
Introduction, Scope and Evolution

As per eCommittee mandate generalized Case Management Software for all the High Courts and Subordinate Courts in the country have been developed . Case Information System National Core version 3.2 implemented for the District Judiciary in the country. CIS is divided into core and periphery modules. The Core is developed at NIC,SDU, Pune and each state can develop their own periphery modules.

SCOPE

The Case information system of the e courts project moving to the 3rd version itself shows the indispensable place it has taken in the District Judiciary and in taking the case details 24X7 to all stakeholders in the administration of Justice. CIS 3.2 further opens the doors of district judiciary digitilization towards the much awaited e filing, epayments, & eprocess.

Evolution of CIS



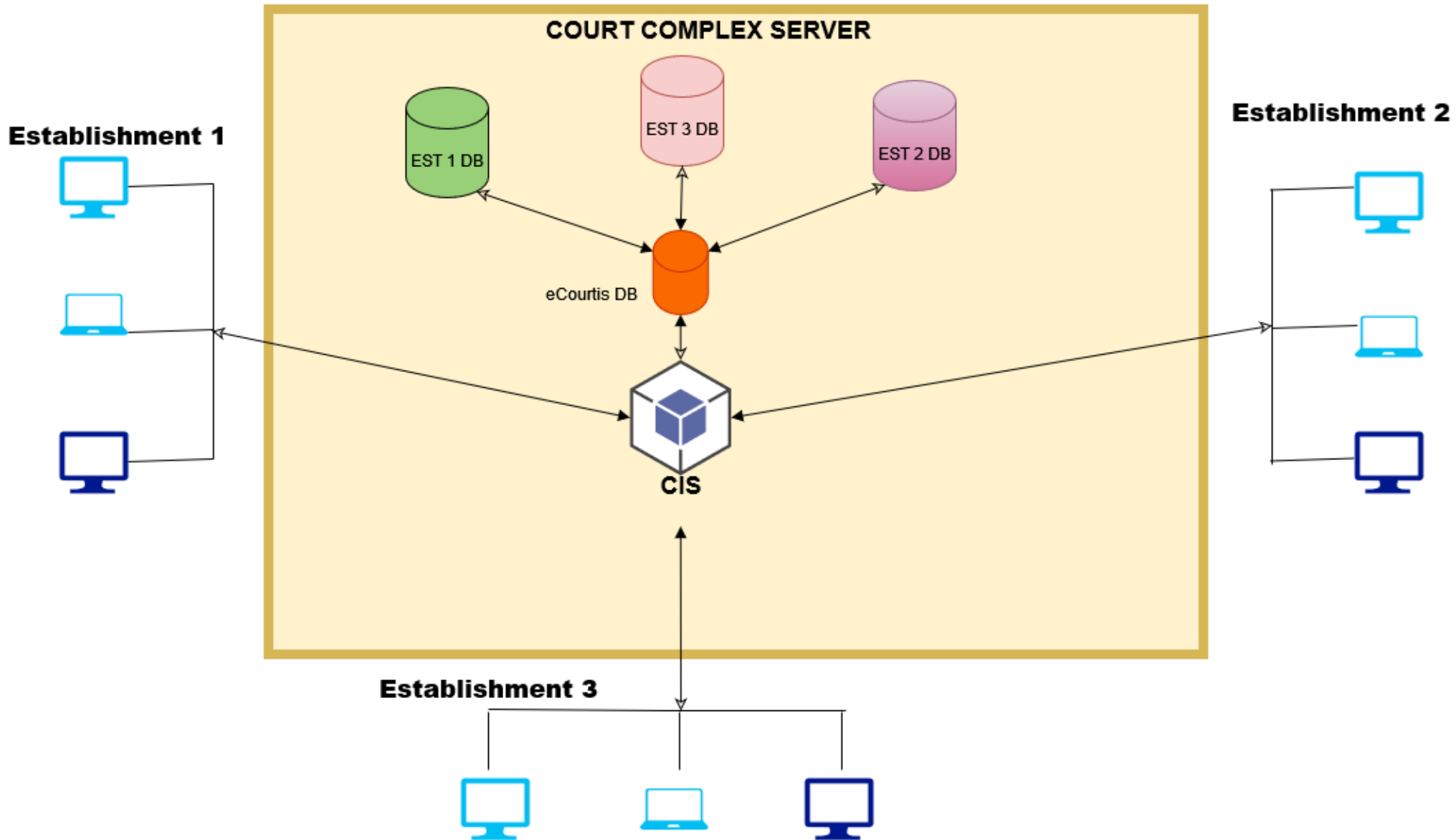
Deployment Architecture

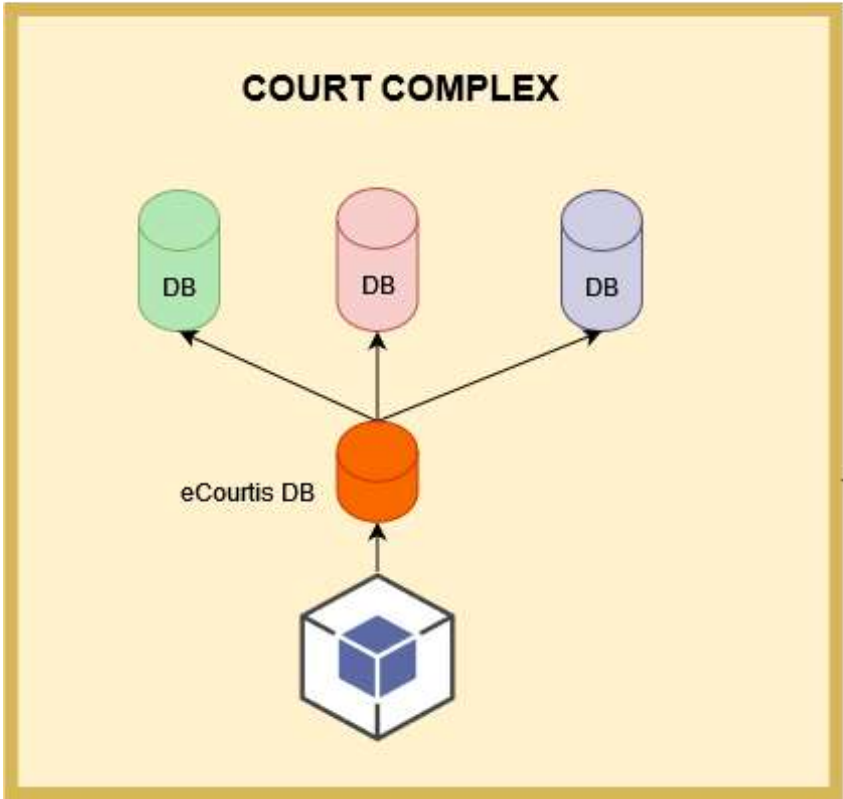
What ?

A deployment architecture **depicts the mapping of a logical architecture to a physical environment**. The physical environment includes the computing nodes in an intranet or Internet environment, CPUs, memory, storage devices, and other hardware and network devices.

Why?

Software architecture **allows you to manage and understand what it would take to make a particular change**. Furthermore, a good architecture reduces complexity so that most of the changes that need to be made can be limited to a single element or just a few elements, without having to make architectural changes.





Data Replication and Backup
(Except eCourtis User DB)

eCourt Cloud VMs

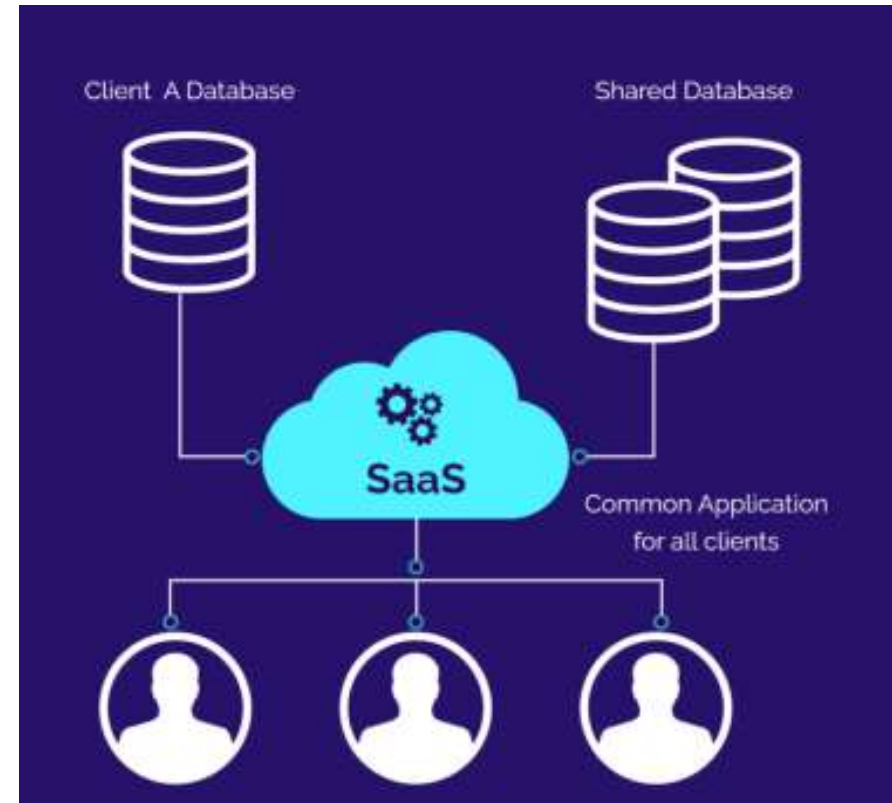
Terms to familiar with

★ Distributed database architecture

😊 A distributed database system allows applications to access data from multiple (remote/local) databases.

★ SaaS Applications

😊 Software as a service is a software delivery model in which software is made available for multiple users by a single centrally hosted manner.



Enterprise Application Integration

An Enterprise Application Integration is a mechanism which helps in an efficient data flow from one program to another. With this, it also enables the existing data to flow between different software by supplying different interfaces for managing different data flow.

CIS Major Integrations

1. ICJS
2. eFiling
3. NSTEP
4. NJDG
5. eCOurt Services (Website and mobile app)
6. JUSTIS App

e-Filing Application

District Judiciary Kerala

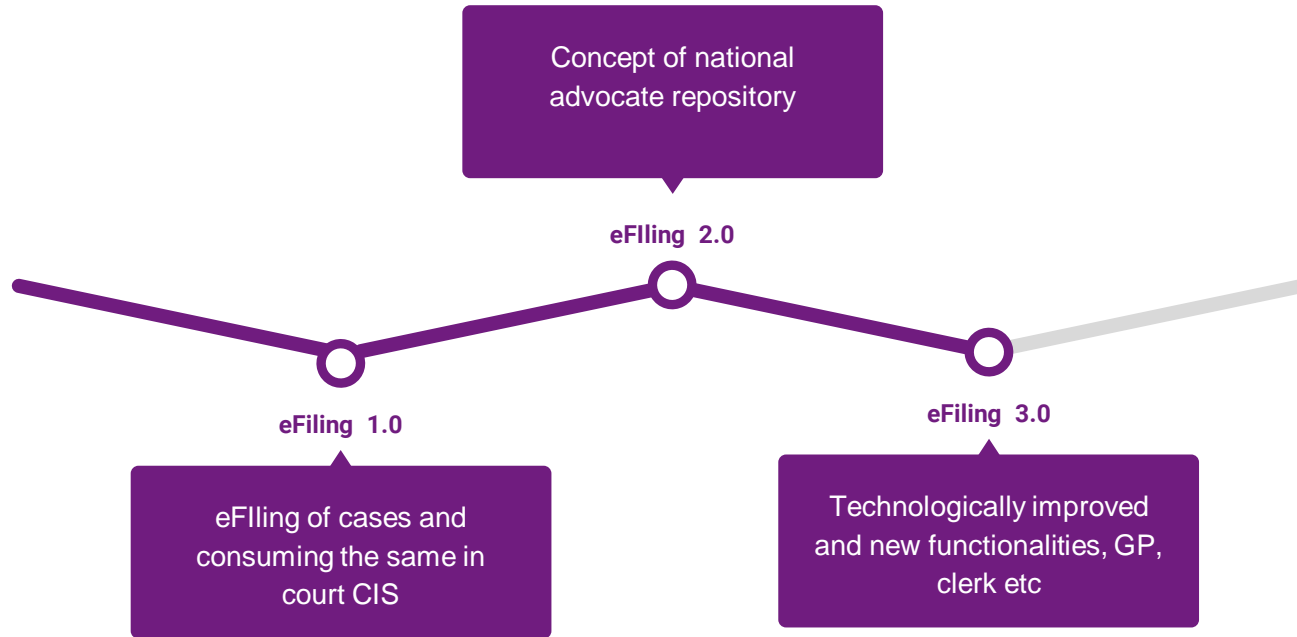
Provided by eCommittee Supreme Court of India

Designed & Developed By NIC

Overview

The e-Committee of the Supreme Court of India has designed & set up the e-filing System which enables electronic filing of legal papers (“e-filing”). Using the e-filing, cases (both civil and criminal) can be filed before all high courts and district courts that adopt this e-filing system. Introduction of this e-filing system is aimed at promoting paperless filing & create time and cost saving efficiencies by adopting technological solution to file cases before various courts in India.

Evolution of eFiling



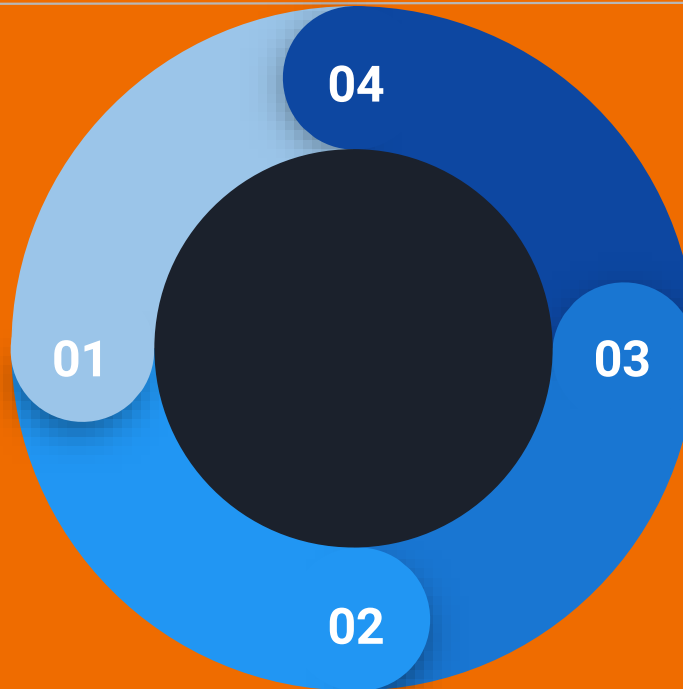
eFiling of Cases Cycle diagram

eFile a Case

New case filed by advocate with his/her login details.

Cases Transferred to Court CIS

In this stage the entire cases details will be transferred to concerned court. The advocate will be notified in each stage by SMS.



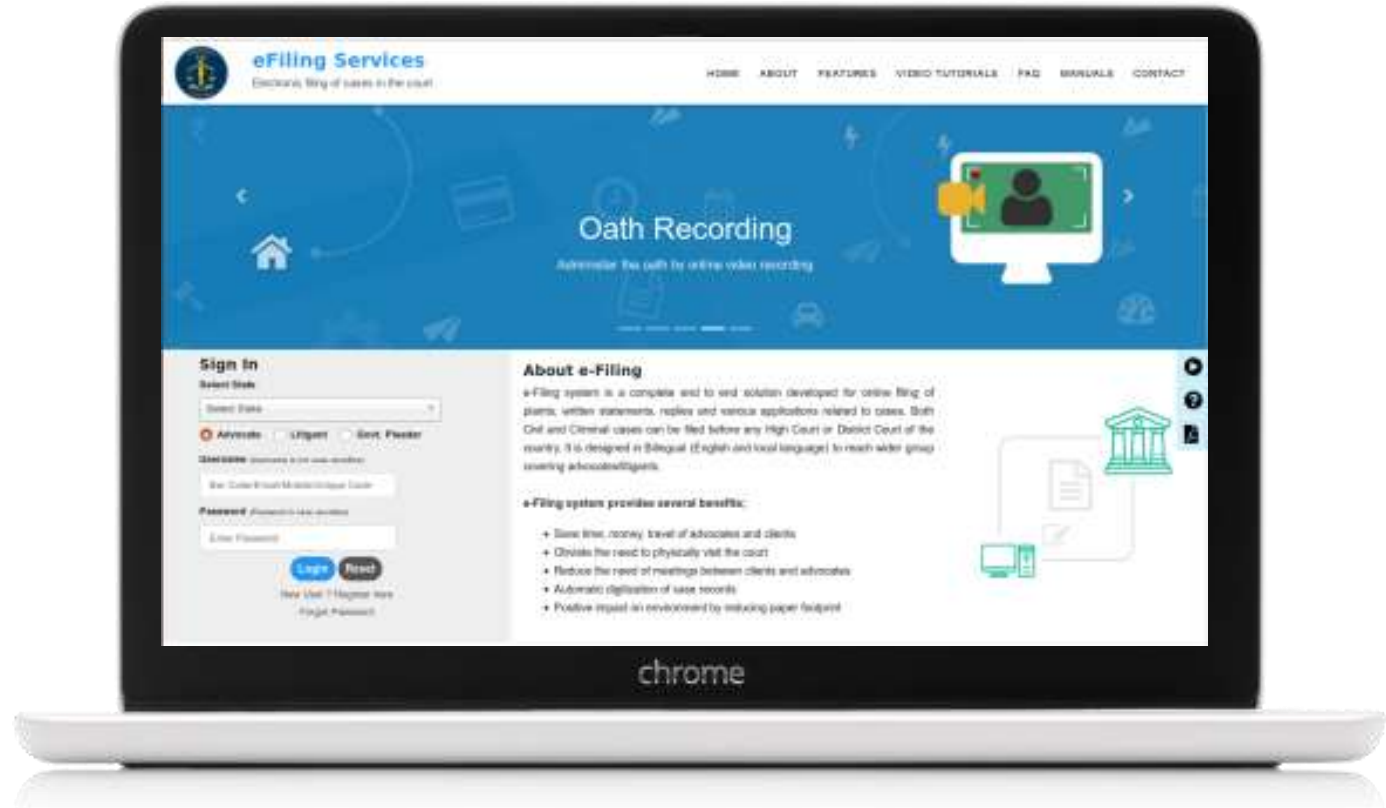
Get Registration Details

Advocate can view the details of the cases registered in the court CIS using the eFiling dashboard.

Case Scrutiny Details

Advocate get notified about cases scrutiny, if any objections found he/she can resubmit after cure defects

eFiling Services 3.0



Test Link : <https://csc.ecourts.gov.in/pdedev/>

Introduction

eFiling Ver.3.0 system is a complete end to end solution developed for online filing of complaints, written statements, replies and various applications related to cases. Both Civil and Criminal cases can be filed before any High Court or District Court of the country. It is designed in Bilingual (English and local language) to reach wider group covering advocates/litigants/Government Pleaders/Advocate clerks.

The main objectives

- Register with eFiling system
 - File New Cases
 - Online Vakalat procedure
 - Upload Pleadings for cases
 - E-sign pleading for authentication
 - Record Oath for pleadings
 - IA filing
 - Online payments
 - Partners Management
 - Manage exclusive portfolio
 - Import/Export to/from eCourts App
-

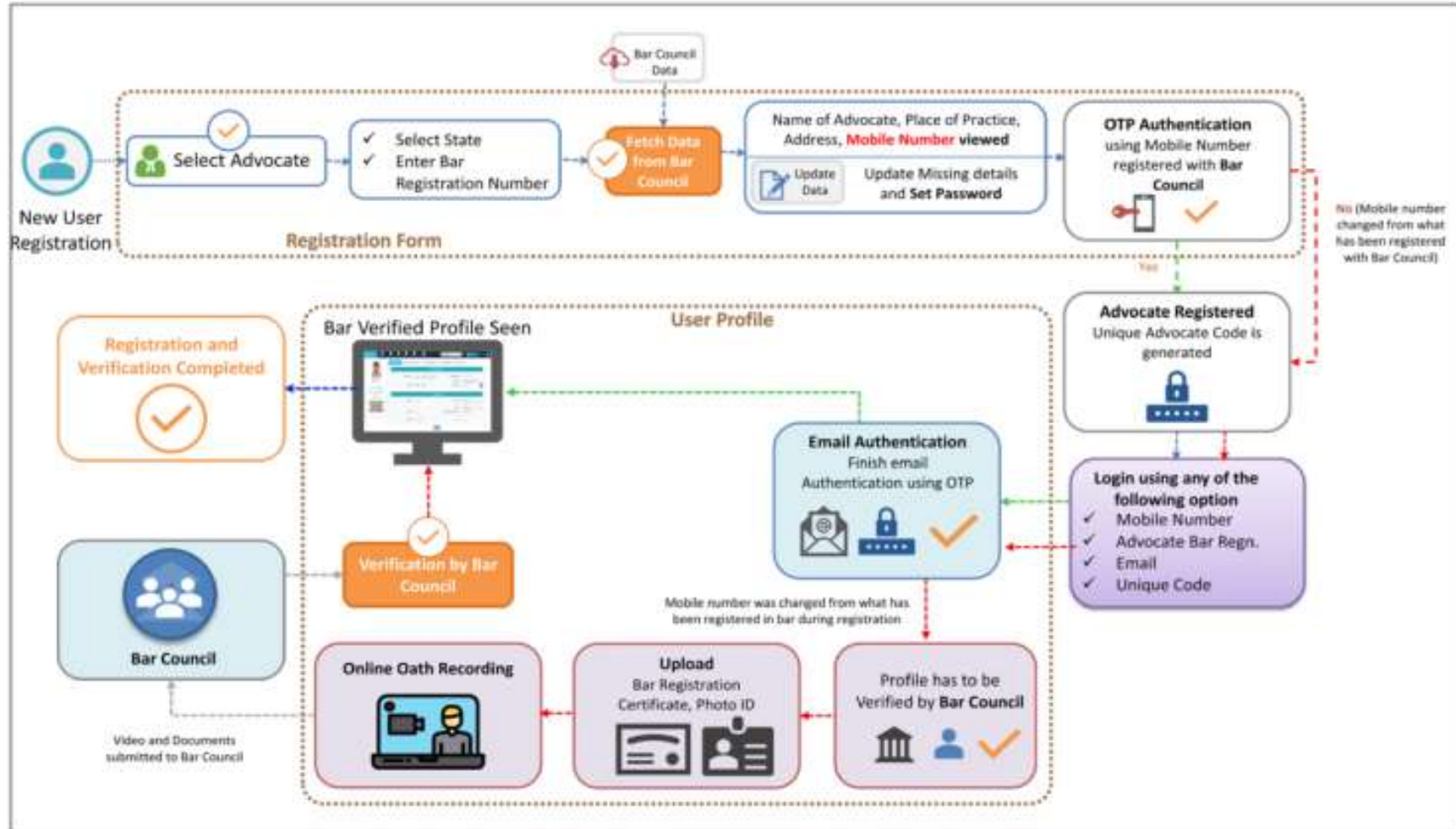
eFiling Functional Architecture Diagrams



Functional Architecture is **a term that** deals with how systems function to carry out end-to-end processes in order to maximize efficiency. A functional software architecture is an architectural model that identifies enterprise functions, interactions and corresponding IT needs.

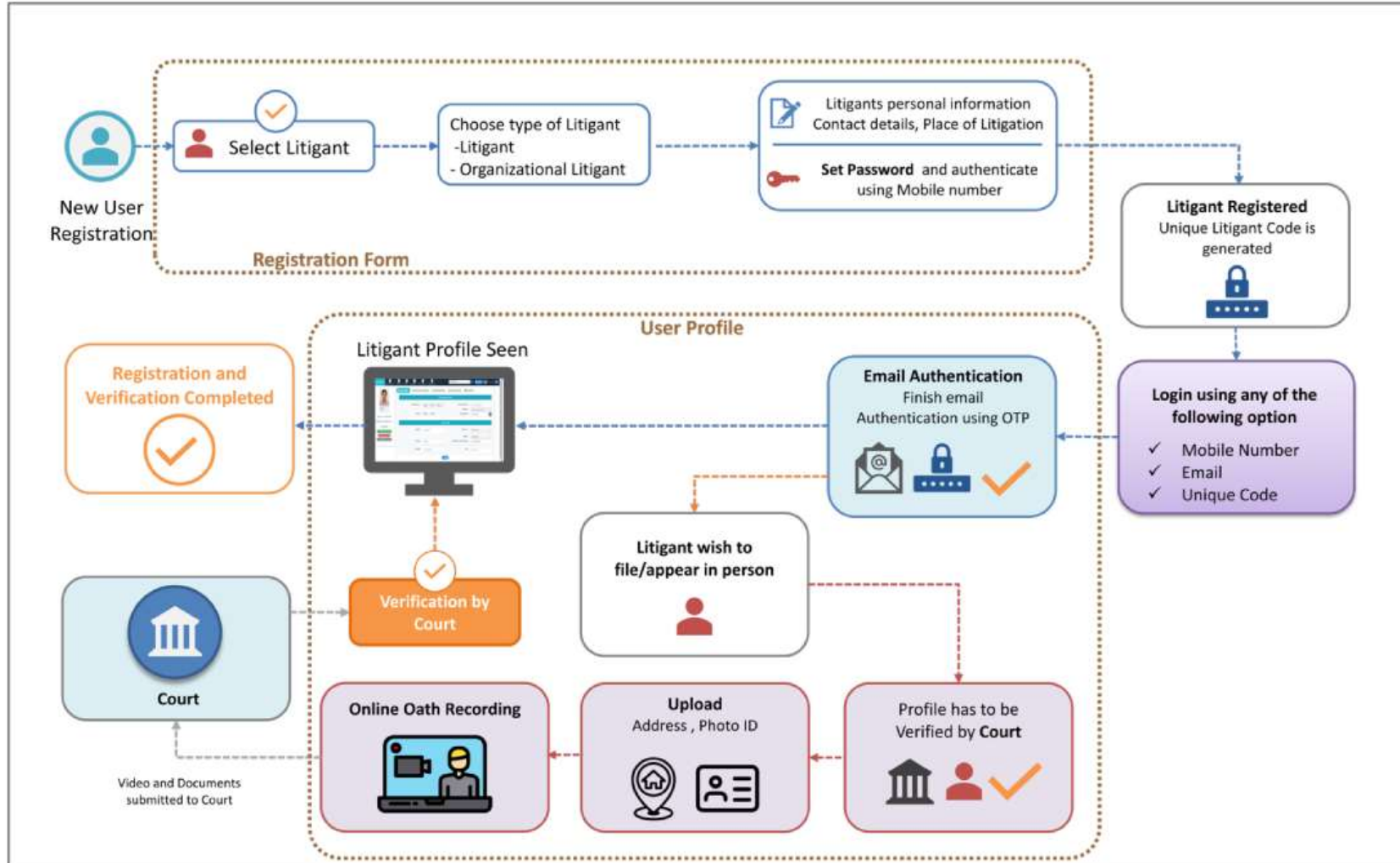
Registration process(Advocates)

The registration process differs for different users. Basic flow of events during registration of advocates is depicted in the block diagram.



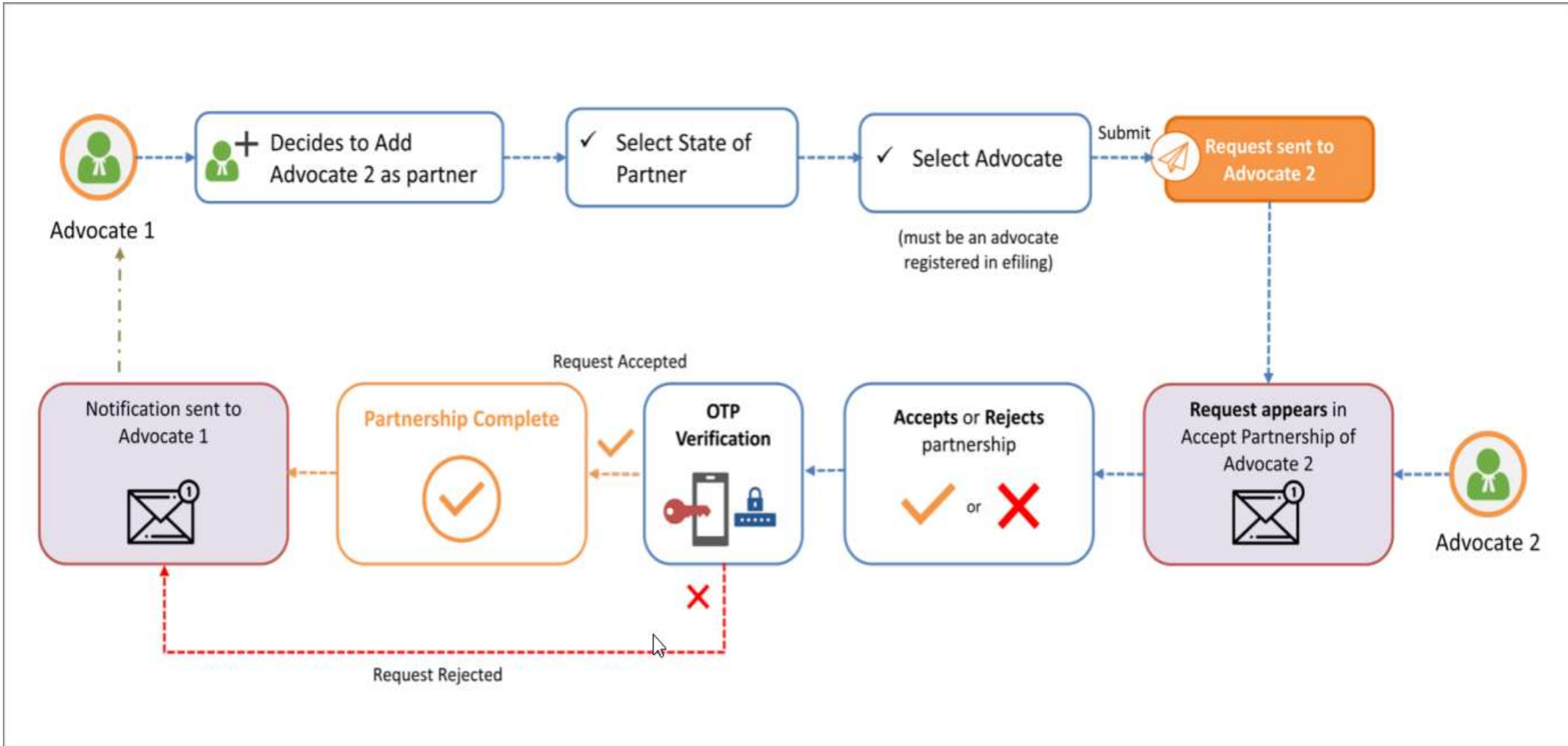
Registration process(Litigants)

The registration process differs for different users. Basic flow of events during registration of litigants is depicted in the block diagram.



My Partners (only for Advocates)

The menu enables advocates to manage partners by adding or revoking partnerships. The block diagram below depicts the flow of events.



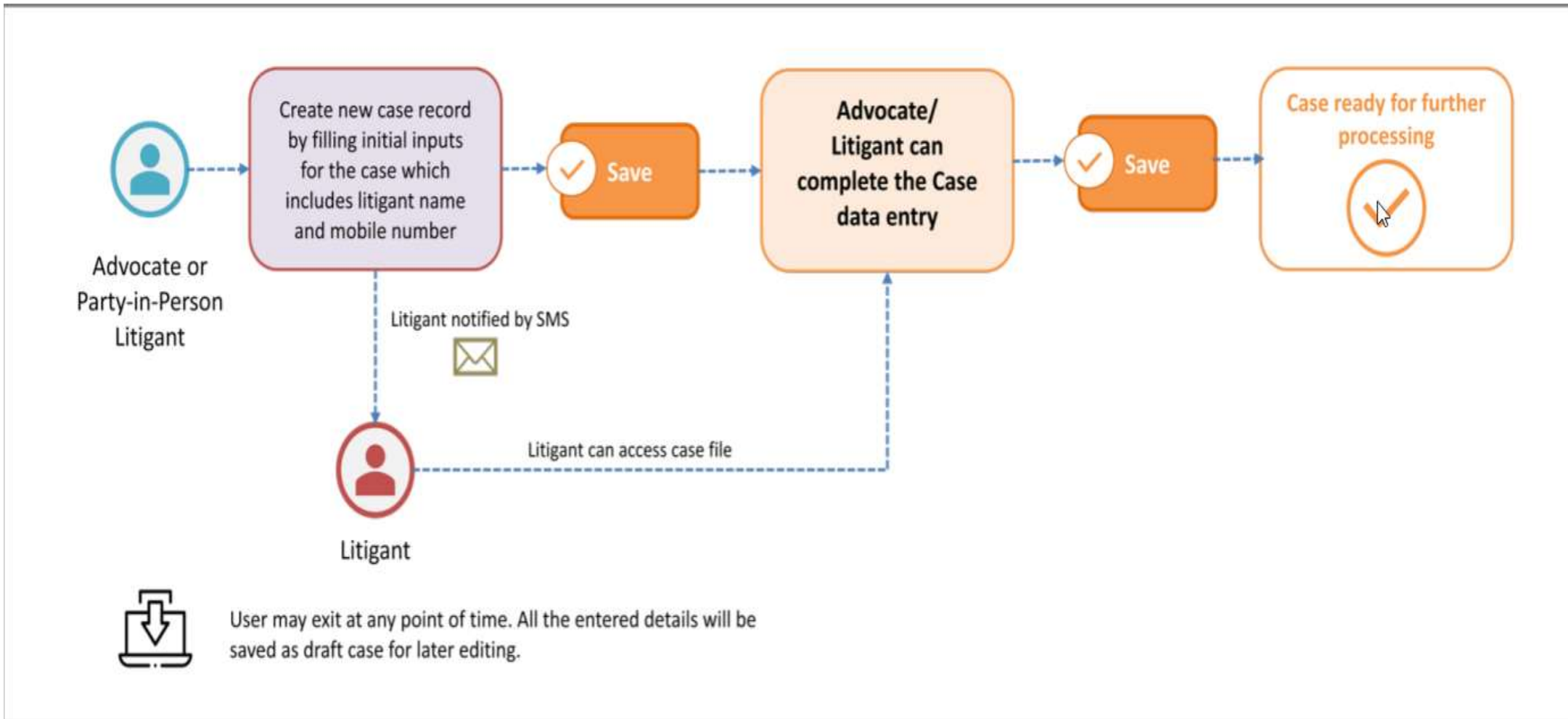
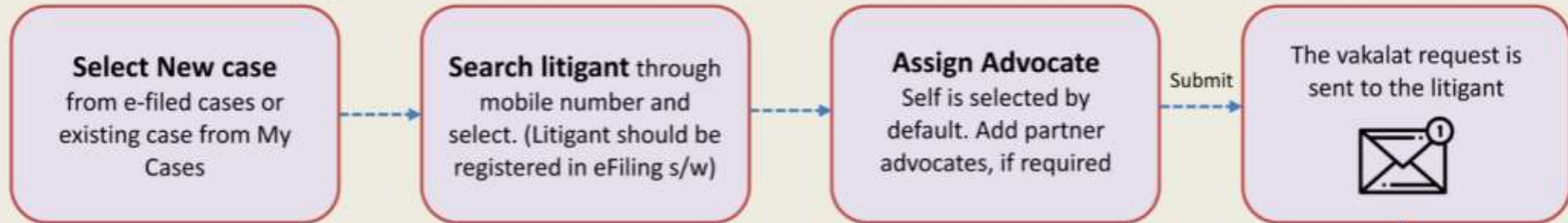


Fig: Case Filing Flow

1. Advocate assigns lawyer/s



2. Litigant sends Offer



3. Advocate accepts the Offer



Advocate



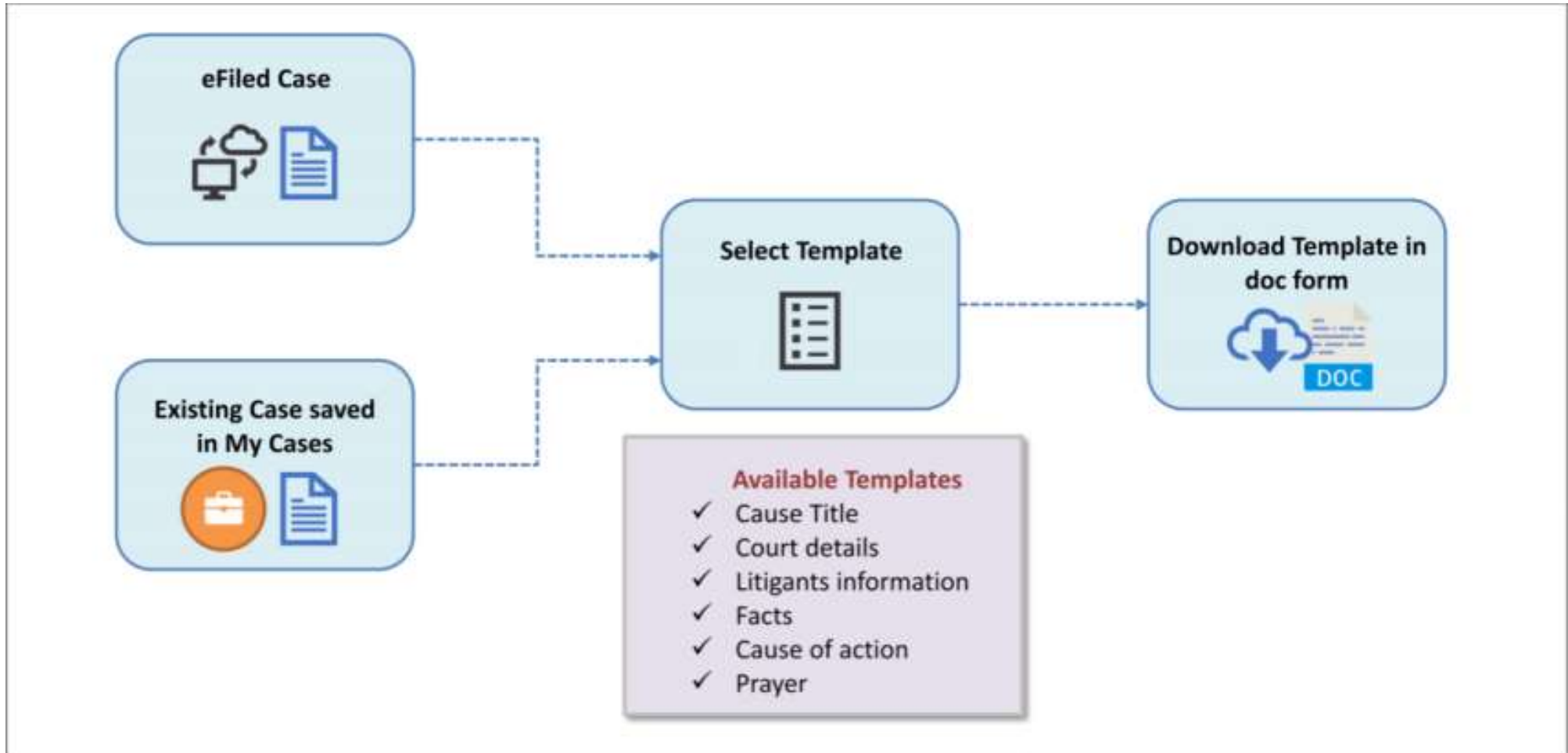
Litigant



Advocate

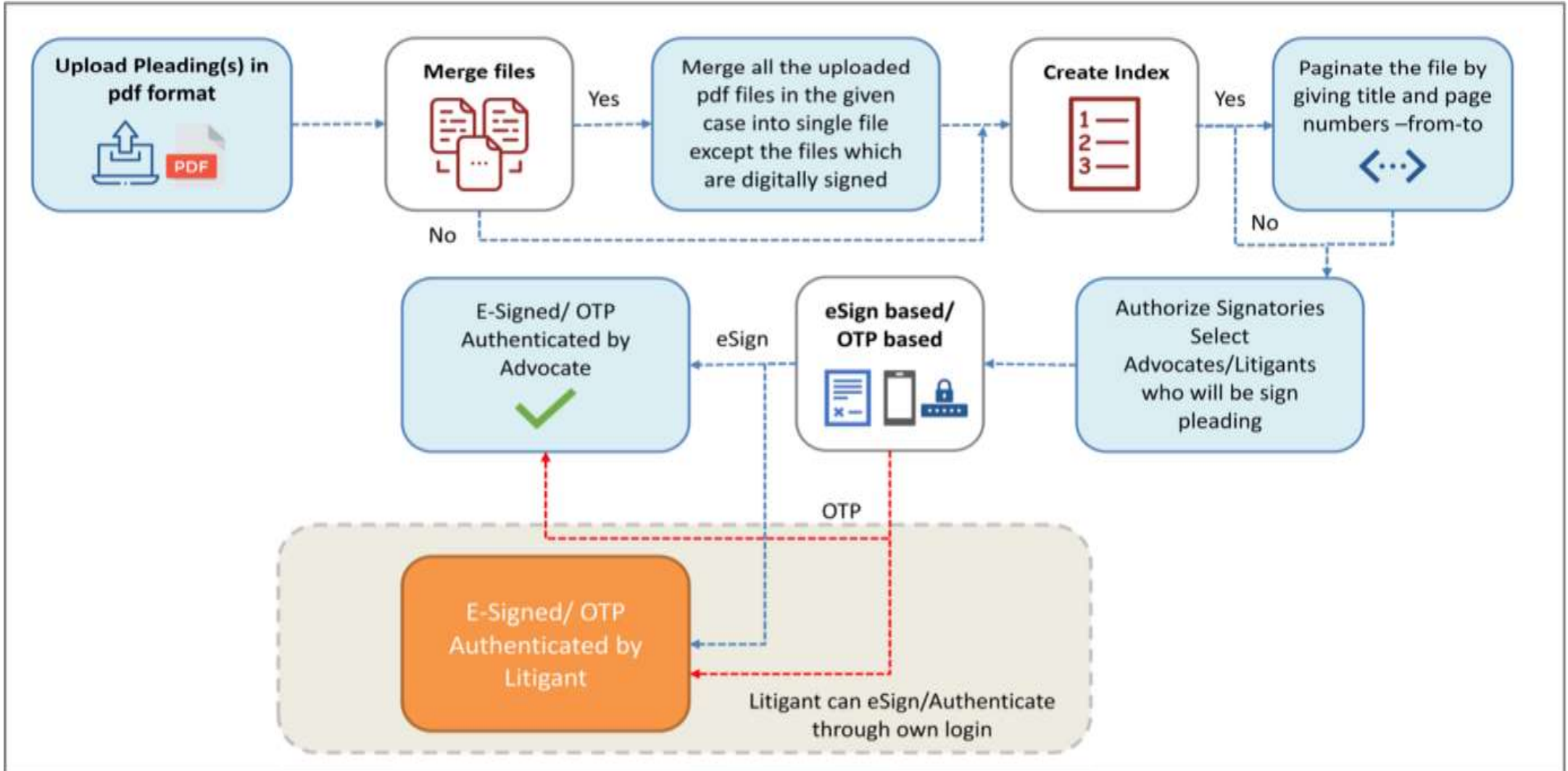
Use Templates (For Advocates)

The formats for legal documents such as Affidavit, Complaint, Petition and other similar documents are standardized by the court. Since these documents are regularly required for most of the cases, standard templates are provided for ease of preparing the documents.



Upload Pleadings

This submenu allows user to upload their legal documents, provide indexing, authorise signatories and e-Sign the pleadings. The details of the submenu are described further below



Interlocutory Applications Filing (only for Advocate)

Only advocates can file the applications and pay the fee. However, the application needs to be authenticated by advocate as well by litigant. A

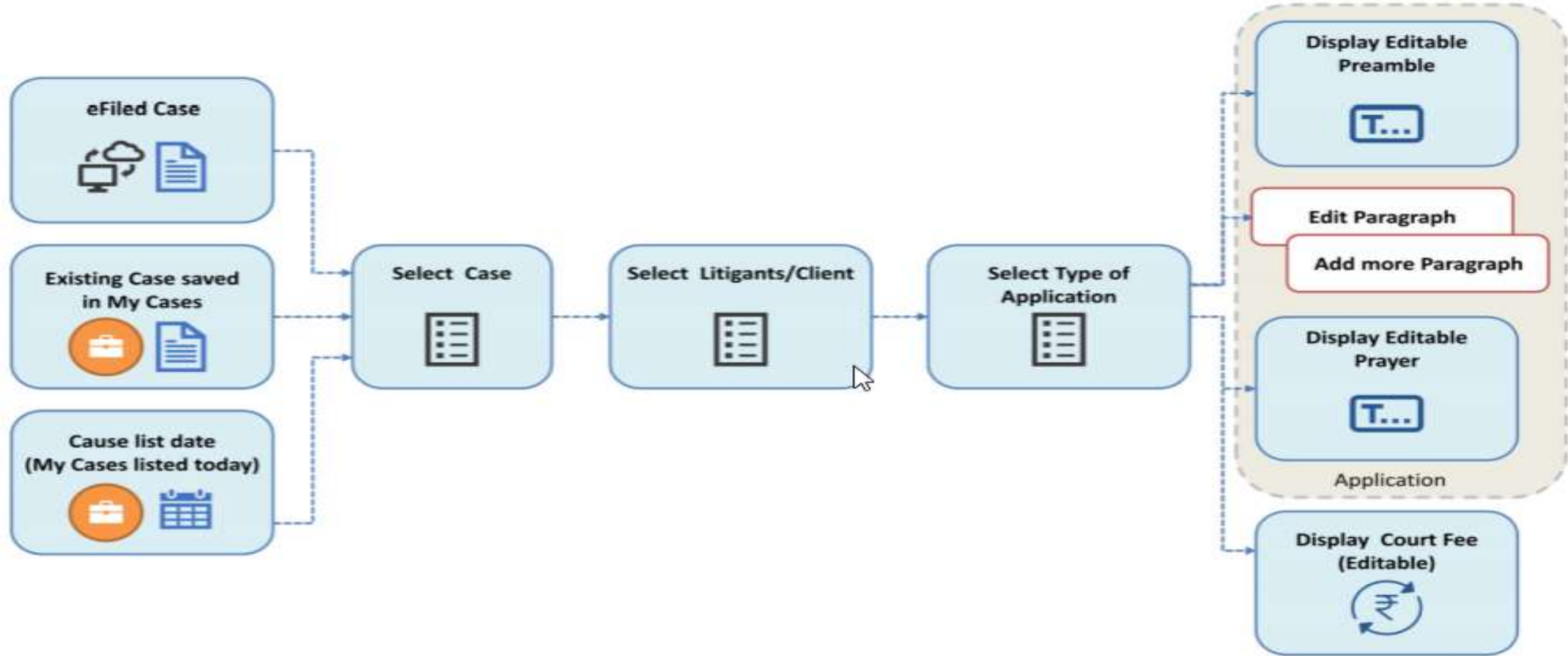


Fig: Application Filing Flow

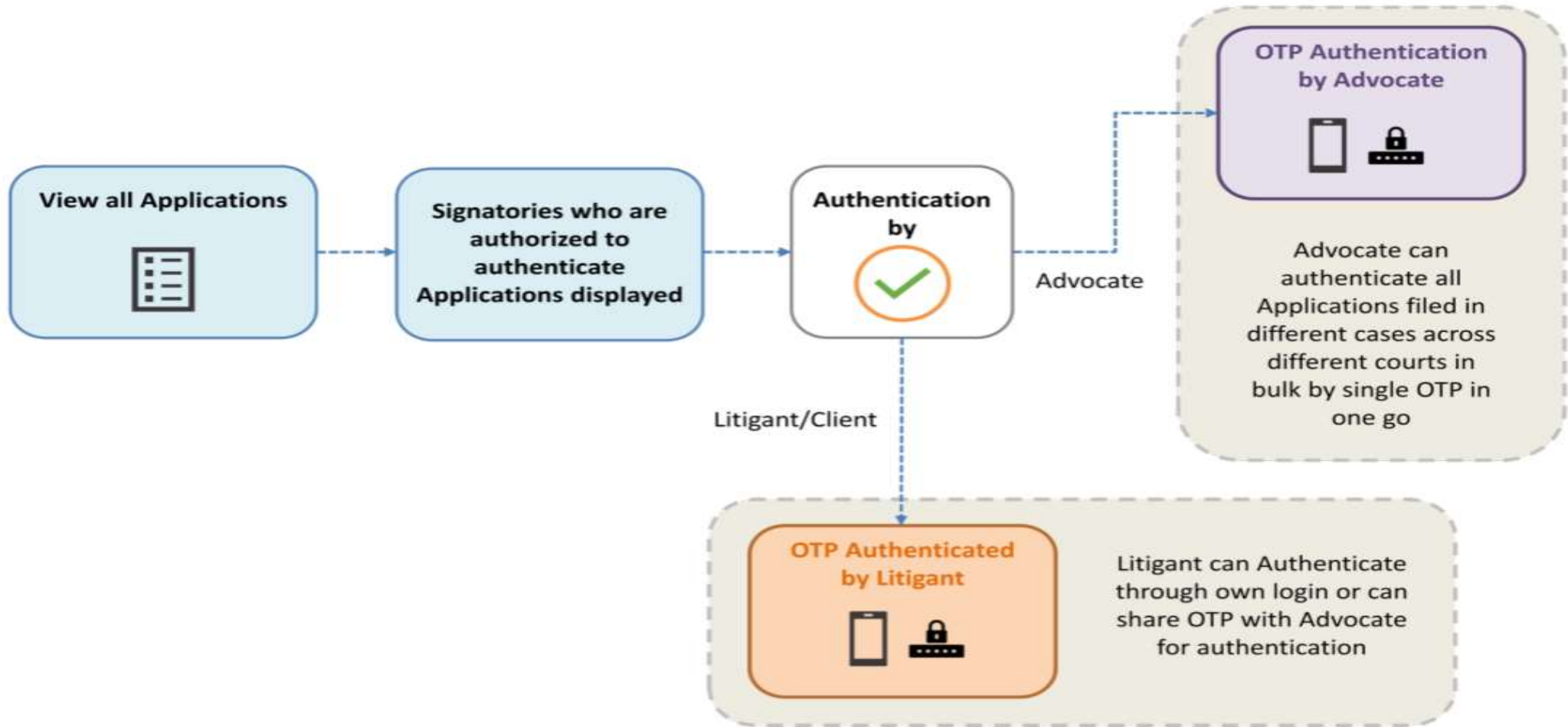
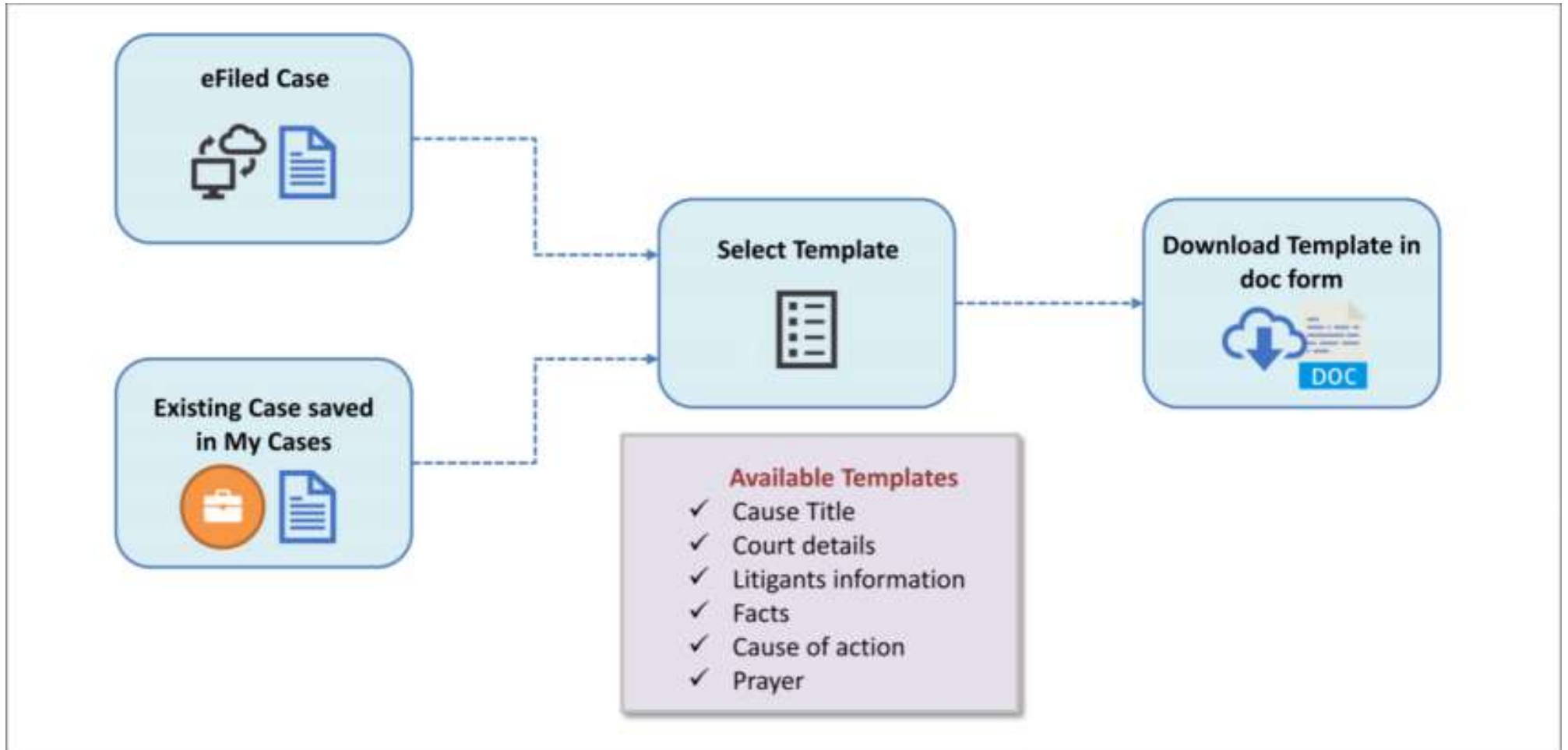


Fig: Application Authentication Flow

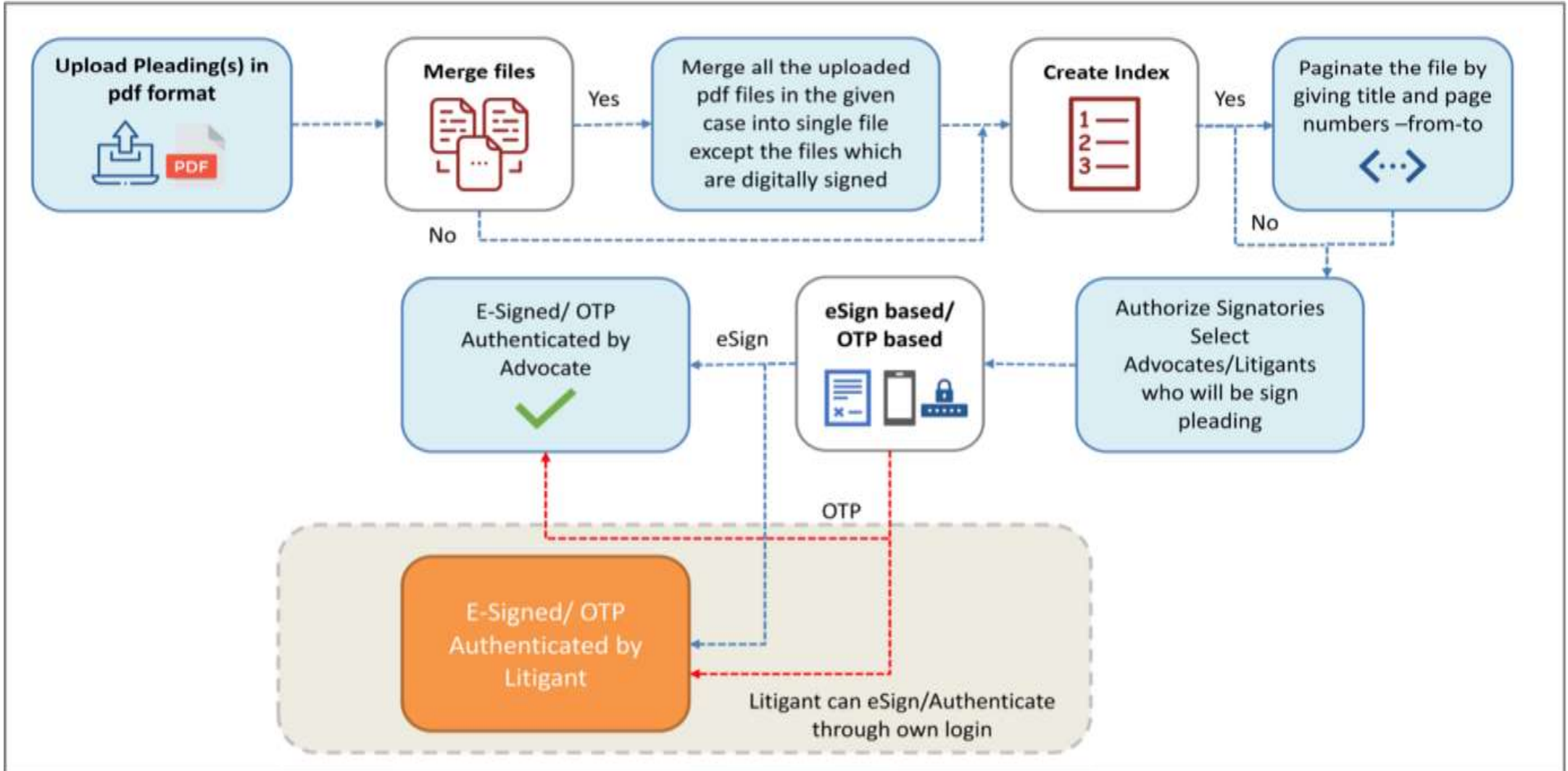
Use Templates (For Advocates)

The formats for legal documents such as Affidavit, Complaint, Petition and other similar documents are standardized by the court. Since these documents are regularly required for most of the cases, standard templates are provided for ease of preparing the documents.



Upload Pleadings

This submenu allows user to upload their legal documents, provide indexing, authorise signatories and e-Sign the pleadings. The details of the submenu are described further below



Interlocutory Applications Filing (only for Advocate)

Only advocates can file the applications and pay the fee. However, the application needs to be authenticated by advocate as well by litigant. A

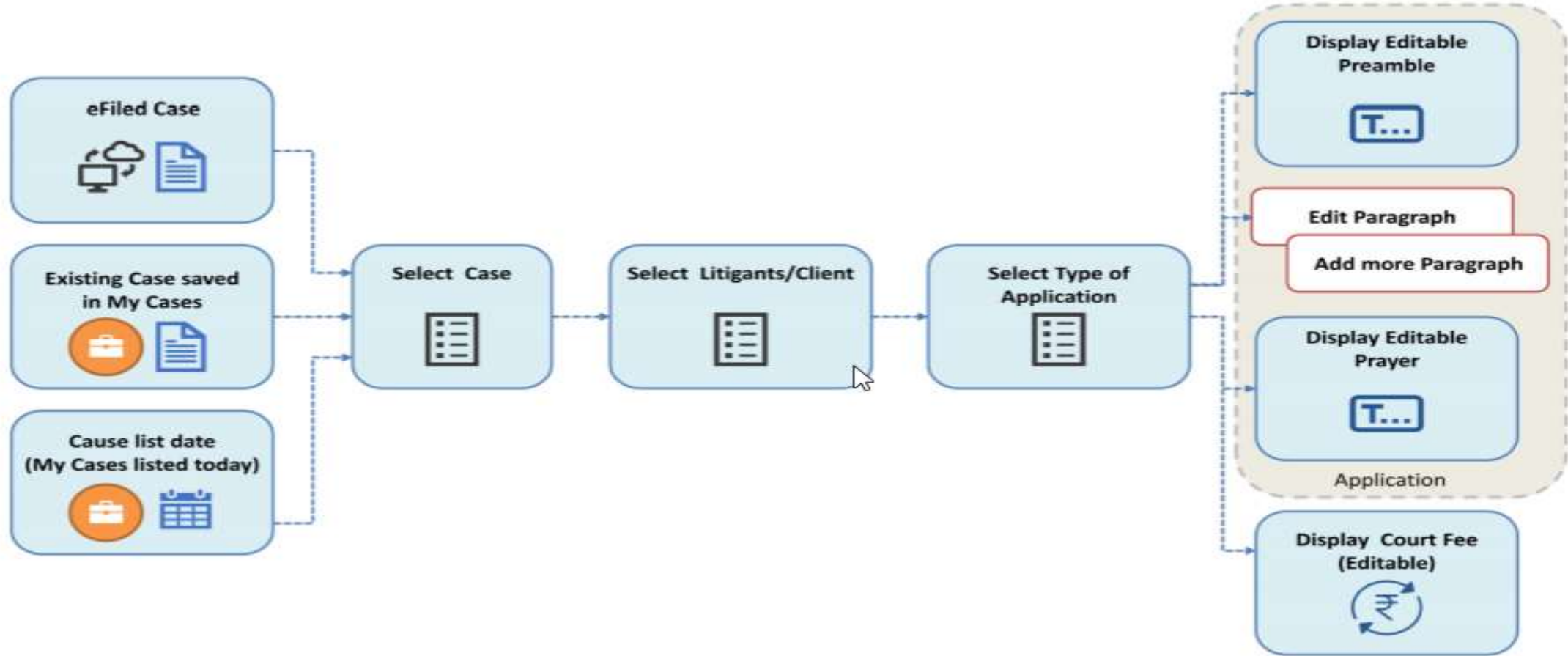


Fig: Application Filing Flow

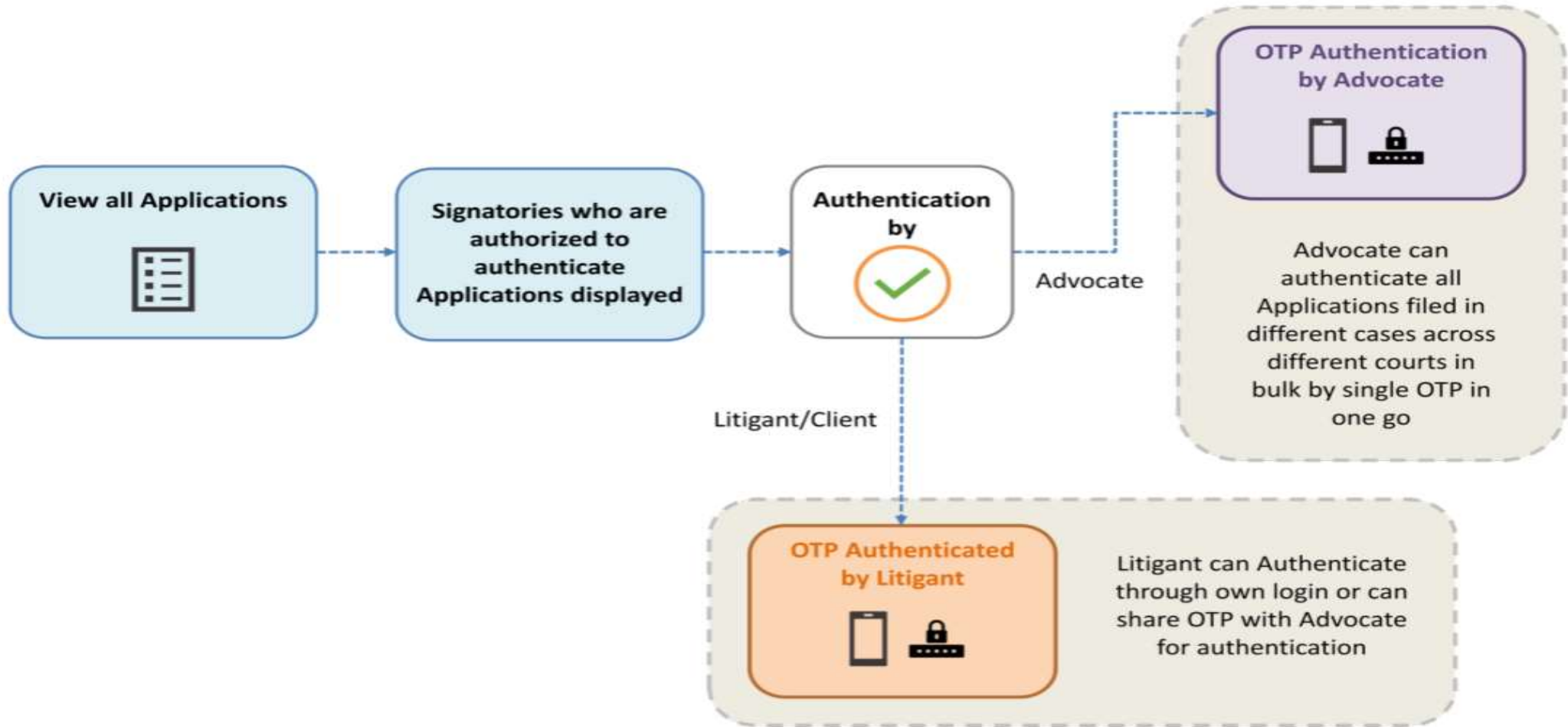


Fig: Application Authentication Flow

National Judicial Data Grid

Provided by eCommittee Supreme Court of India

Designed & Developed By NIC

eCourts Website & NJDG

eCourts website has moved to the 2nd most accessed website of our nation and NJDG has contributed in moving our nation forward in the ranking of the World Bank. With this roaring success of eCourt website and NJDG, Every staffs should remember that CIS data entered from each and every courts of our country are the lifeline of the web page www.eCourts.gov.in. From the eCourts web page under www.eCourts.gov.in and through eCourts mobile applications, anyone can now get the Case Status; Court orders; Cause list details online through computers or even through smart phone with Internet connection all at a mouse click and that too in the comfort of the home.

NJDG is implemented to be the National Data Warehouse for Case Data including Orders and Judgments. NJDG works as a monitoring tool to identify, manage and reduce pendency of cases.

The Data available in NJDG can be used for

- Data mining
- Online Analytical Processing
- Business Intelligent (B I)Tools
- Integration with Interoperable Justice System (ICJS)
- Act as Decision Support Systems
- To make policy for managing caseloads, effective Court Management
- To enhance Justice Delivery System quantitatively and qualitatively more affordable

NJDG Intra Application

NJDG portal provides multiple facilities for the court officials and Honourable Judges through a secured intranet provision. The NJDG intra application provides monitoring and management tools for Data and server monitoring, national masters for unification, administrations masters for establishments, complex, police stations, acts etc. The intra application provides facility for monitoring and managing various projects like epay, ICJS, eFiling. Managing the eSeva Kendras throughout the state can be managed using the intra application.

The guardian judge login provides facility for the Judges to access various options related to their jurisdictional courts/Districts. Generation of various eRegisters is also taken up recently through NJDG intra application.

JustIS Mobile App

Judges Portfolio

Court
Management
System for
Judicial Officers



Justis mobile app is the latest digital court management tool gifted by the ecommittee supreme court of India empowering the judicial officers of the District and Taluk level courts for efficient court management and for speedy administration of justice at District level. This Justis app gives the exclusive data of a particular court where the judicial officer is working with data analysis of the entire court data of the particular court .Earlier one was able to get the disposal and pending case details of any court but now this Justis app throws more light into further drill down of the said data like Case type wise, Year wise, stage wise disposal and pendency etc from the judicial officer's perspective .With this new digital data analytic tool to trace out and pinpoint the issues regarding the pendency and disposal of their court and can stay focused with the real issues of the court which will no doubt result in more scientific court management through Justis app.

Major Features

- ★ Judicial Officer Login with JO Code
- ★ Judicial Officer wise dashboard
- ★ Alerts Tab helps Judges to get a quick glance of, Total count of Today's Listed cases, Undated Cases, Received by the Institution and Transfer in the last month, current pending, Disposed in the current month.
- ★ Pending cases list (Year, case type, stage wise) and graph(year wise Cases count and year wise Delayed count)
- ★ Disposed cases list (Civil, Criminal, both) and graph(Case count of Pending and Disposed for the respective YEAR.)

-
- ★ Case search tab (CNR search, Scan QR Code search, Case No. , Party Name, Filing No., FIR No., Act Name along with Section)
 - ★ Displays CauseList for the selected Date and selected Designation as per CIVIL and CRIMINAL.
 - ★ Case calendar . On click of Particular Date cell a list of Cases appears below the Calendar View.
 - ★ Add short Note about case.
 - ★ View only Daily Business for the Case
 - ★ Important cases tab



**ICJS Committee of
the Supreme Court of India**



**Government of India
Ministry of Home Affairs**



**National Crime Record Bureau
Ministry of Home Affairs**



**National Informatics Centre
Ministry of Information &
Communication
Technology**

Introduction

Interoperable Criminal Justice System (ICJS) is an initiative of the e-Committee aims to integrate CCTNS (Crime and Criminal Tracking Network & Systems) system, eCourt, ePrison, eForensics, eProsecution, Fingerprint and Women & Child Department (WCD) systems for seamless flow of data and information among these pillars of Criminal Justice System to achieve 'One Data Once Entry'. The ICJS interoperable services shall provide a platform for various pillars to exchange information and data through uniform web-service APIs to build an effective criminal justice system across the country.

The FIR and Charge sheet data is being fed by Police department in CCTNS software. Documents like FIR, case diary and charge sheet are uploaded by police in PDF format for utilization by the courts. With the aid of the ICJS platform, the metadata of all FIRs and charge sheets across India is available in ICJS. ICJS has provided API's to eCourts project so that data related to FIRs and Charge Sheet can be consumed in CIS thus minimizing or eliminating the need of data entry by court staff and can be accessed by all the High Courts and subordinate courts. In CIS, Mapping of National codes of Act & Police Stations and Census Codes of State, Districts, Taluka and Villages are required to be carried out

Create a National integrated end to end workflow **Platform** for data exchange required for Criminal Justice System

Integration with other large **Government databases** (data and services)



Seamless **data exchange** among stakeholders for one data once entry.

(Data sharing matrix approved by the eCommittee of the Supreme Court of India)

Enabling **Analytics** and user-friendly tools for efficiency, timeliness and preventive interventions.

Seamless information exchange across all the pillars in a secured manner enhances the efficiency of the Criminal Justice delivery System.

ICJS Stakeholders

1. Core Stakeholders



Police



Courts



Prisons



Prosecution



Forensic

2. Other Stakeholders



NIA



RPF



CBI



Arms Licenses



WCD



IVFRT / Passport



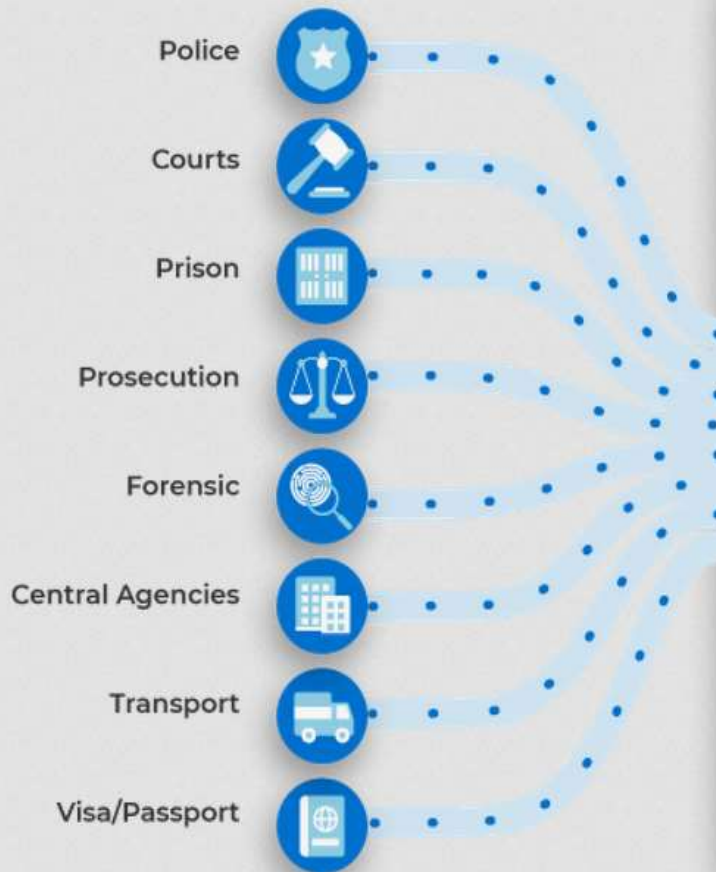
Vahan /
Sarathi



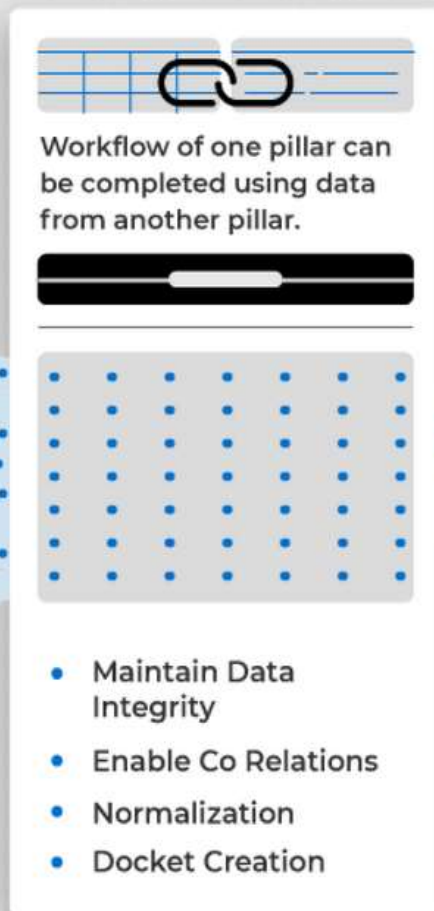
Open Ended - Other central agencies like CEIB, ED etc. can be added

ICJS Workflow

From Multiple Data Sources



Centralisation at ICJS



Powerful Operations



Searchable Crime Metadata

Police Data

Data is synchronized by all the PS of a State to SDC which is further synchronized with the NDC. This is updated on ICJS.



ALISData

Arms Licenses Issuance System Data from MHA is synchronized on daily basis with ICJS



Judiciary Data

CIS Data at District is synchronised with NJDG. Data is synched with ICJS



CBI / NIA / RPF Data

CBI, NIA & RPF data is synchronised on daily basis from respective HQs.



Prisons Data

ePrisons Data of all State is synched with ICJS.



IVFRT / Passport Data

POC for Search as a Service and ID based data



Prosecution Data

eProsecution Data from States is available online with ICJS.



Vahan /Sarathi Data

POC for Search on ID based data from Transport Domain.



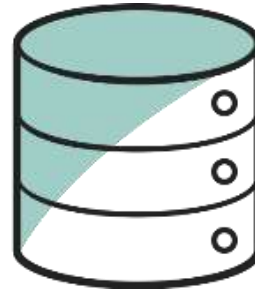
Forensic Data

eForensic Data from all labs is available to ICJS online.



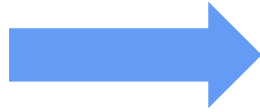
High Court Data

Data is being synchronised with the Delhi High Court.



ICJS Searchable Meta Data and APIs

Data Exchange @ Police



ICJS to Police

- . ICJS - Mini Statement
- . **Court - Charge sheet Status**
- . **Court - Court Case Details**
- . **Court - Cause list**
- . **Court - Court order and Hearing Details**
- . ICJS - Complaint Details
- . Prison - Prisoner Profile
- . Prison - Visitor Details
- . Prison - Admission/Release
- . Prosecution - Legal Advice
- . Prosecution - Trial Proceedings
- . Forensic - Exhibit Report Status

Consumption @ Police

- . Mini Statement
- . Charge sheet Status
- . Court Case Details
- . Cause List
- . Complaints from Central Sources
- . Prisoner Details
- . Exhibit Report status

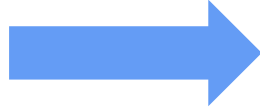
Police to ICJS

- . FIR Details with Attachments
- . Arrest Details
- . Charge-Sheet/Final Report with attachments
- . Charge sheet scanned copy
- . FIR No against Complaint

Status

- . Viewing of data is available in 36 states/UTs
- . Consumption of data has been operationalized in 30 States/UTs States
- . Work in remaining states is in progress

Data Exchange @ Court



ICJS to Courts

- ICJS - Mini statement
- Police - FIR Details with Attachment
- Police - Arrest Details
- Other Agencies - FIR Data
- Other Agencies - Chargesheet
- Police - Charge-Sheet/Final Report
- Police - Charge sheet scanned copy
- Prison - Prisoner detail
- Prison - Visitor Details
- Prison - Admission/Release
- Prison - Parole List
- Forensic - Exhibit Report Status

Consumption @ Courts

- Police - FIR Details with Attachment
- Police - Arrest Details
- Police - Charge-Sheet/Final Report
- Police - Charge sheet scanned copy

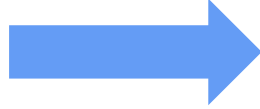
Courts to ICJS

- Court Case Details
- Court Order
- Hearing Details
- Cause list
- Search on Cases

Status

- Data is available in 36 states/UTs
- Consumption of data is available in 30 State/UTs
- Work is in progress in 6 states

Data Exchange @ Prison



ePrisons



ICJS to Prisons

- . ICJS - Mini Statement
- . Police - FIR Data
- . Police - Arrest Details
- . Court - Court Case Details
- . Court - Cause list
- . Court - Court order
- . Court - Hearing Details

Consumption @ Prisons

- . Mini Statement
- . Domain Linkage
- . FIR Data
- . Court Case Details
- . Court order and Hearing Details

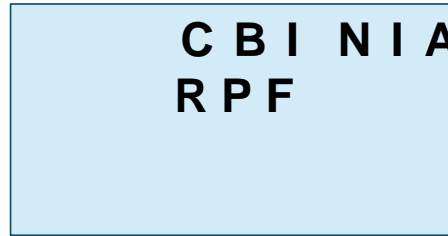
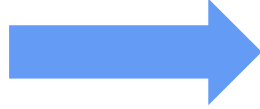
Prisons to ICJS

- . Prisoner Profile
- . Admission / Release
- . Movement details
- . Visitors Data
- . Parole List

Status

- . Viewing of Data in 35 States /UTs
- . Data consumption in 35 States/UTs
- . Remaining states are under progress

Data Exchange @ Other Agencies



ICJS to Other Agencies

- ICJS - Mini Statement
- Court - Court Case Details
- Court - Cause list
- Court - Court order and Hearing Details
- Prison - Prisoner detail
- Prison - Visitor Details
- Prison - Admission/Released
- Prosecution - Prosecution case detail
- Forensic - Exhibit Report detail
- Police – FIR Details
- Police – GD No based details

Consumption @ Agencies

- Mini Statement
- Court - Court Case Details
- Court - Court order and Hearing Details



Consumption @ Agencies

- FIR Data
- GD No based data

Agencies to ICJS

- FIR Searchable Meta Data
- FIR No based details

Services with Other Agencies

I V F R T
VAHAN /
SARATHI



Services to ICJS (POC)

- Search on Passport details
- Passport No & Visa No based details
- Search of Vahan and Sarathi
- RC No & License No based details

ICJS Features & Services

- 1 One Data Once Entry**

To Maintain Data integrity among the stakeholders and minimize the data entry efforts of the stakeholders in their application.
- 2 Mini Statement of a Case**

Mini Statement with optimum operative information and status as on date from the ICJS linked data.
- 3 Fingerprint based search**

Fingerprint based identification / verification of Sexual Offenders. This is based on the accused registered with the prison database.
- 4 Criminal Network Visualization**

The linkages among the accused who visited the prisons are connected based on the common FIRs and their Visitors with three levels visualization and can provide detailed information as and when desired by the users.
- 5 Comprehensive Profile of a Criminal**

Comprehensive Document generated from the ICJS linked data from the native data of the stakeholders.
- 6 PAN India Search – Cross Domains**

Searching the domain searchable data of a stakeholders across India. The details of an ID can be fetched from the respective domain live data. Searching an entity of one domain in other domains on key fields of the searchable data with percentage of matching as defined by the user.



- 7 Prison Custody Certificates**

The Comprehensive prisoner's document about the cases filed against an accused and their trial / conviction status. This is required by the courts for necessary in legal proceedings for Bail, Sentence and Parole.
- 8 Dashboards for each Domain**

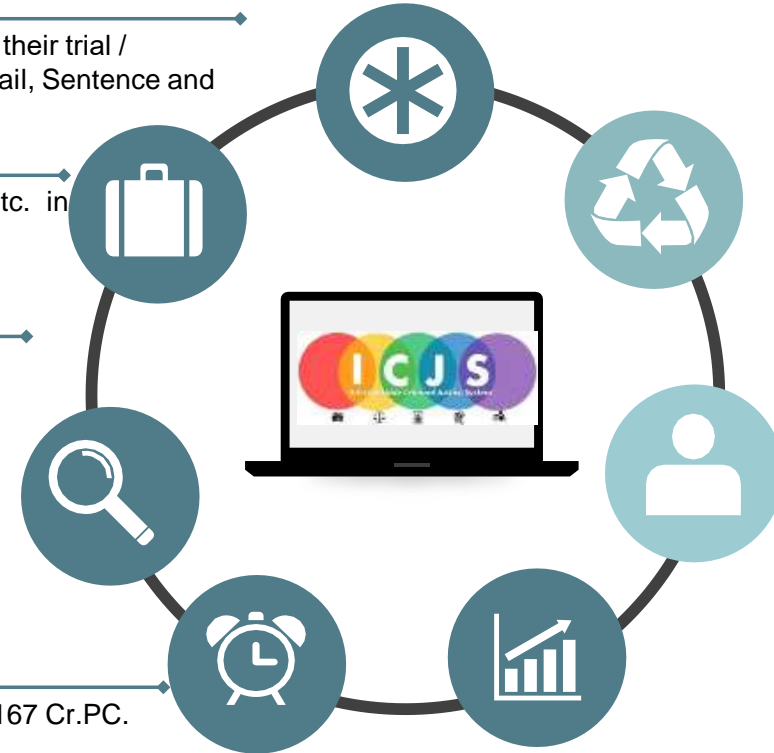
Analyze the data of the individual pillars to understand the trends, patterns, anomalies etc. in network
- 9 Monitoring tools- ITSSO, NDSO & POCSO**

These are the monitoring tools pertaining to sexual and other offences adhering to Cr.P.C. provisions amended as required by the MHA and other stakeholders.
- 10 Release / Admission Prisoners for Police**

Police requires information about Admission and Release of prisoners which can be earmarked for an individual accused for necessary preparation at their end.
- 1 Under Trial Prisoners – Eligible for Bail**

There are various legal provision for premature release of the accused namely 436(A), 167 Cr.PC. This required for the Court, UTRC and Prisons for necessary process at their end.
- 12 Parole Alerts (Out and Over Stay) for Police and Prisons**

Police wants the list of the accused out on Parole and their overstay so that preventive measures can be taken to avoid further delay in surrendering in the prisons.



13

Appeal Alerts (After Conviction)

As and when an accused get convicted, appeal can be filed in a month time by the accused or on their behalf of the Legal Aid Authorities like DSLSA, SLSA and NALSA.

14

Antecedent Verification

The Antecedent verification services marked for a Police station and their disposal by them based on the auto search made by the ICJS. This can be extended to the government, public sectors and state government for various purposes.

15

Adjournment Alert

Alerts on two or more Adjournments as sought by the Prosecutors in a case are given to their seniors for their information.

16

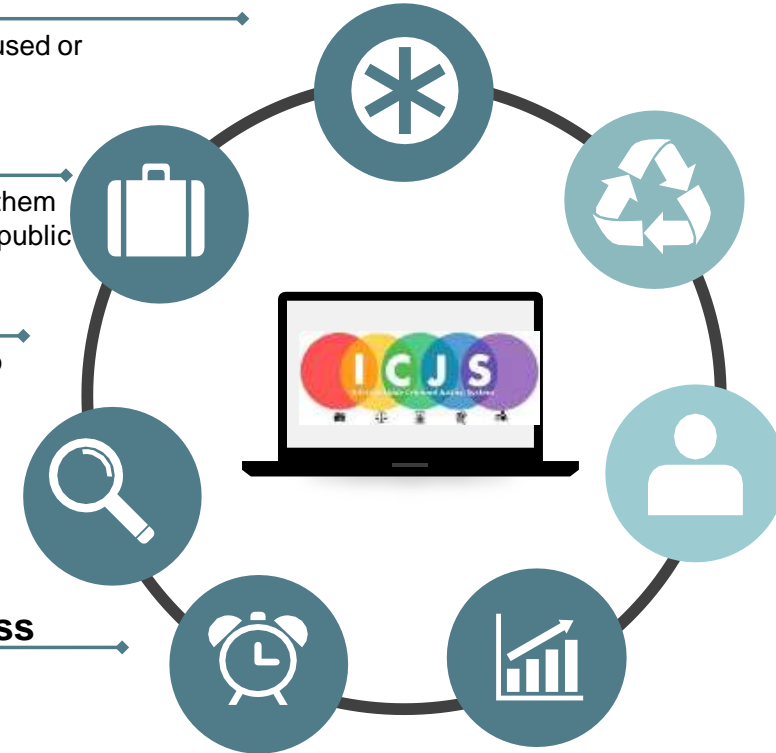
Services in collaboration with Other Agencies

- FIR/GD based data service to the Ministry of Women and Child Development.
- POCSO data Service to the Hon'ble Supreme Court of India.

17

Services in collaboration with Other Agencies – Under Process

- Service to the PrisonConnect software of the Hon'ble Supreme Court for filing Appeal directly from the Prisons.
- Motor Accident Cases data service to the MACT for Victim Compensation.
- Prevention of Atrocities against SC/ST data service to Ministry of Social Justice for victim compensation.



Way Forward



Antecedent Verification Services

The ICJS Services are to be monetized and can be extended to the government, public sectors and state government for various purposes. Police need to perform numerous verifications.



New Feature in Criminal Network

The Criminal network is to be added with more features like common offence, area of crime committed, etc for better criminal profiling.



Enhanced tools for Investigation

To add more value to the investigating agencies, new monitoring tools are to added like Proclaimed offenders, Absconders, Habitual offenders etc. This data will be useful for the antecedent verification service where these offenders can be identified and brought to justice



Crime Data Compilation

Offence / location wise linked data as service for Sexual Offences, SC/ST Offences, Motor Accident etc. Primarily, Police is submitting various reports generated from their data and does compilation of the reports as required by the Court and various Ministries.



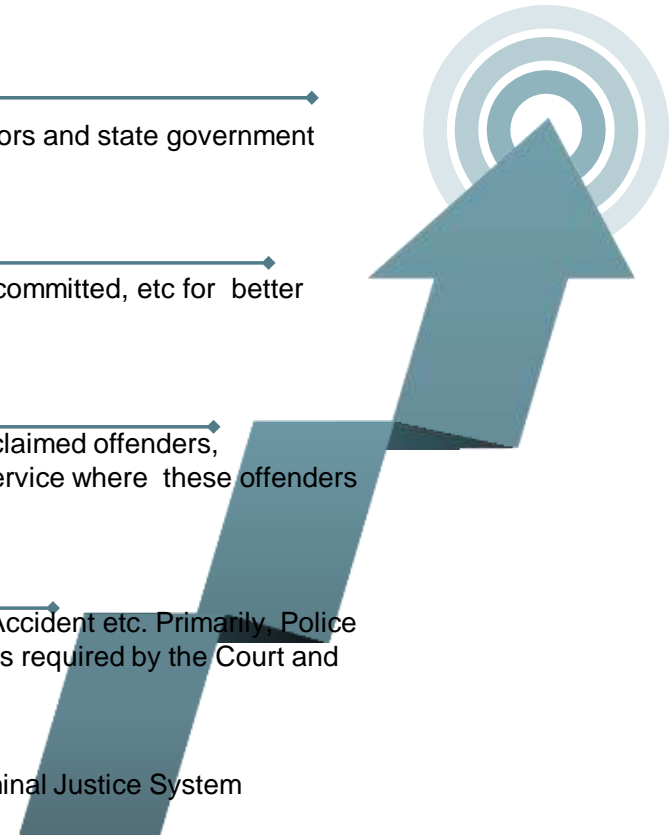
DG(P) Dashboard

Dashboard for the Director General of Police and other heads of the departments in the Criminal Justice System pertaining to their domain.



Photo based identification / verification

Photo based identification / verification of accused in prisons for paperless admission and release and daily attendance in open jails. This will also be extended to other investigating agencies for the purpose of identification and verification of accused while arresting them.



Criminal Network



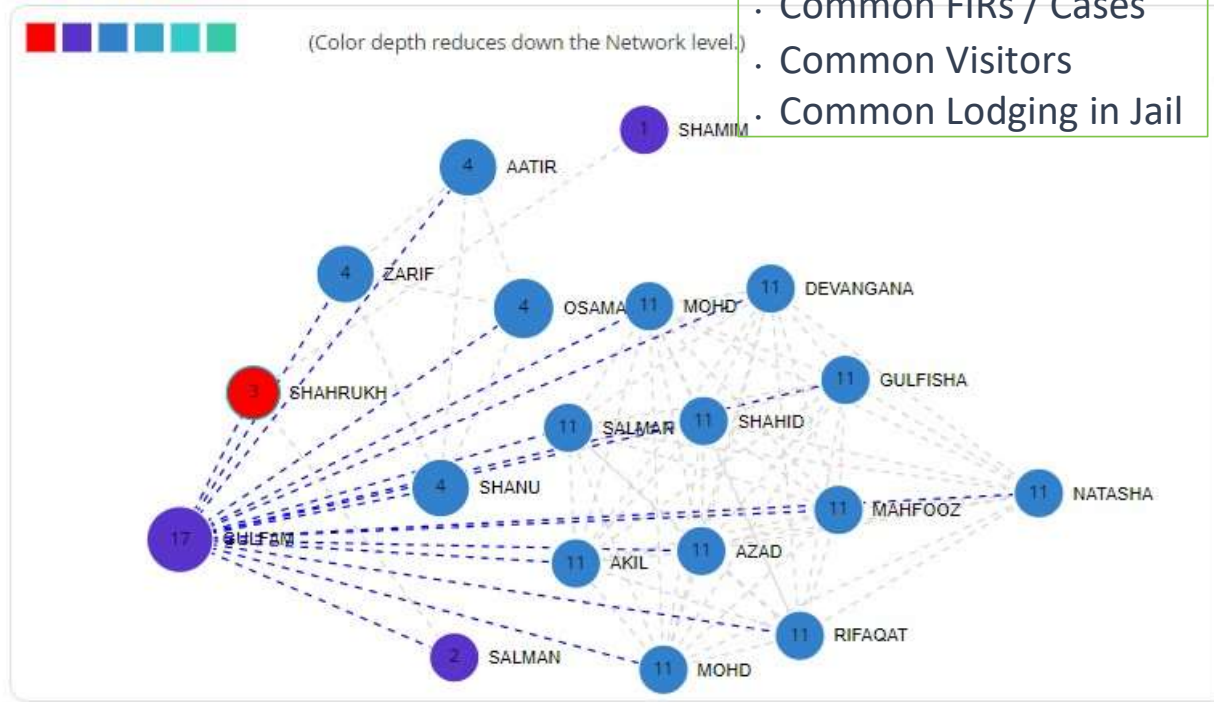
GULFAM SONU CHIKNA

1111684/DELHI

IPC 147 148 149 186 188 353 34
amp;amp; 25 27 ARMS ACT
amp;amp; 3/4 PDPP ACT,IPC 147
148 149 186 353 120B,IPC 147 148
149 380 452 436 427 34,IPC 147
148 149 436 3/4 PDPP ACT,IPC 147
148 149 436 amp;amp; 3/4 PDPP
ACT,IPC 147 148 436 34.

Linking Criteria

- Common FIRs / Cases
- Common Visitors
- Common Lodging in Jail



X

Prisoner ID	1111684
Present Status	Inside Jail
Prisoner Name	GULFAM @ SONU CHIKNA
Age	24
Admission Date	10/03/2020
Probable Release Date	03/04/2030
Prisoner Type	Detain

[View More](#)

Police

FIR : 0607/2020/DELHI/NORTH EAST/WELCOME

FIR Date	06-12-2020	Act & Section	IPC 1860 [376],IPC 1860 [328],IPC 1860 [506],THE PROTECTION OF CHILDREN FROM SEXUAL OFFENCE ACT, 2012 [6]	Status	
Complainant	1. SAMREEN /Female/17	Victim	1. SAMREEN /Female/17	FIR Status	Chargesheet/Final Form Submitted
Accused	1. MEHARBAN /Male/25	Witness	1. SAMREEN /Female/17 2. ANKITA SINGH /Female		
IO Details	ANKITA SINGH,D/2926,SI (Sub-Inspector)				

Court

CNR : DLSH010020312021

Case Number	SC/0000092/2021	Filing Number	650/2021	Case Status	
Case Type / Court Name	SC - SESSIONS CASES/District and Sessions Judge, Shahdara, KKD			First Hearing Date	26-02-2021
Court Number and Judge	765 - Additional Sessions Judge - POCSO			Next Hearing Date	03-08-2021
Filing Date	26-02-2021	Petitioner Name	STATE	Next Purpose	EVIDENCE
Respondent Name	MEHARBAN			Stage of Case	Prosecution Evidence
Act & Section	Indian Penal Code[328,376,506,],Protection of Children From Sexual Offences Act[6,]				

Prison

Prisoner ID : 1126370

Prisoner Detail	MEHARBAN/Male	Admission Date	27-12-2020
Jail Name	MANDOLI JAIL NO. 12	Prisoner Current Location	Out OF Jail
Last Movement Details		Last Visitor Details	

eProsecution

Prosecution ID : DLDC20212435223

Case Info	FIR no: North East/WELCOME/607/2020 Case Type: POCSO Requested Date: 19-01-2021	Requested by	IO: ANKITA SINGH,D/2926,SI (Sub-Inspector) for Draft Chargesheet	Case Status
Received by	Vinod Kumar Sharma (Chief Prosecutor)	Office Address	North East CPP,Karkardooma court	Forwarded on 19-01-2021

FSL

FSL ID : SFSL(DLH)/10406/BIO/2242/20

FSL Address	MADHUBAN CHOWK,SECTOR 14 ROHINI,DELHI-110085	Entry Date	14-12-2020	Status	Dispatched	Request from organization	WELCOME
Dispatched Date	01-03-2021	FSL Division	BIOLOGY			Report Ready Date	01-03-2021

Basics of Efiling , Epay and Paperless Courts

▶ Currently we are using 2 websites

▶ Ecourts – used for efilng , Court display , Judge display

<https://ecourts.kerala.gov.in/digicourt/>

▶ CMS – used by High Court staff – Causelist generation, interim order generation

<https://cmshck.kerala.gov.in/digicourt/>

E filing

- ▶ E-filing project designed and implemented by the High Court of Kerala has transversed the age-old practice of physical case filing to something that can be done easily from any smartphone /laptop /desktop.
- ▶ Using the E filing portal , advocate/public can file any case online and attend court proceeding through VC , view and track case status, view and download judgments/orders, obtain certified copies etc.

Need of E filing

- Neither paper, nor printing equipments are required for filing a case.
- Eliminates travelling expenses and saving of man hours for the litigants.
- Introduction of E-filing has helped in realizing the full potential of the workforce at individual, team based and organizational level.
- The e-filing has made a profound impact by reducing the carbon footprint of the institution.
- Eliminates movement of physical files by stakeholders.
- Cutting Incidental charges for the litigants including Government.

Features

- ▶ E-filing requires no physical infrastructure to facilitate e- filing, e-payment of requisite fees, scrutiny of case files, publication of Causelists, virtual hearing of cases, digital recording of court proceedings, signing of interim orders/judgments using digital signatures and uploading the same.
- ▶ Reduced delay in communication of interim orders and judgments to litigants
- ▶ Real time sharing of documents amongst parties.
- ▶ It enables real time communication with e filer and the file scrutiny officers with chat facility.

- Search
- My Profile
- Dashboard
- Adv Calendar
- Caveat
- Certified Copy
- Counter/Document
- Court Display
- IA Filing
- Online-Filing
- Opt VC
- Urgent Memo
- Handover/Process
- Vakalath / MOA
- Payment Refund
- Reference Note

Home > Dashboard

Welcome to - ADVOCATE'S DASHBOARD

Attention! Online payment facility for 'Arbitration Requests' is tem

Cases Filed Pending Disposed

Today Tomorrow Adjournd

Writ Civil Criminal



Case Details

Show 10 entries Search:

CNR NUMBER	Case No	View

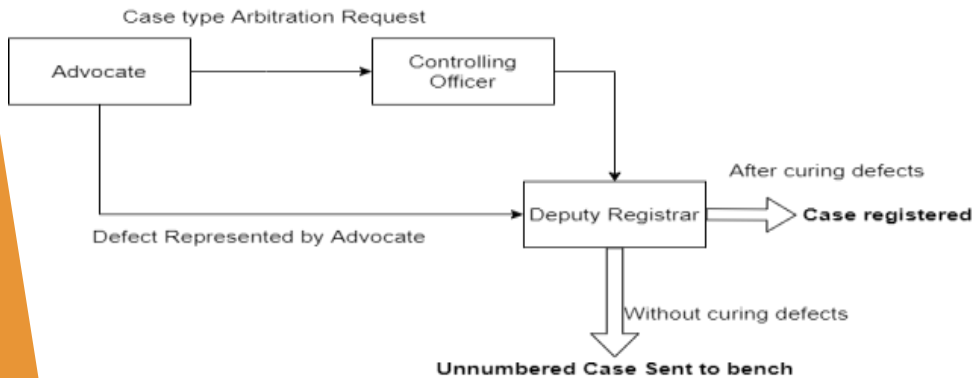
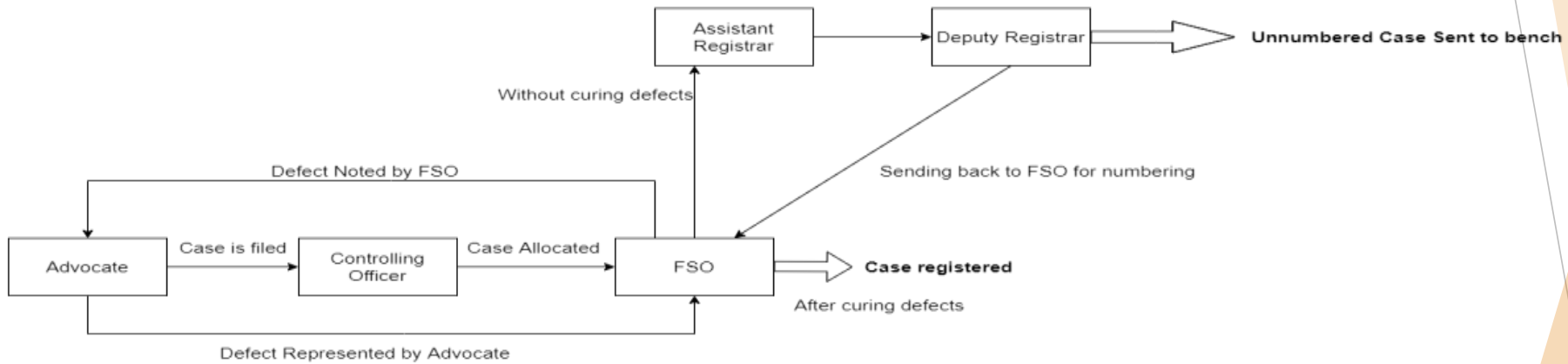
Showing 1 to 1 of 1 entries Previous 1 Next

Certified Copy

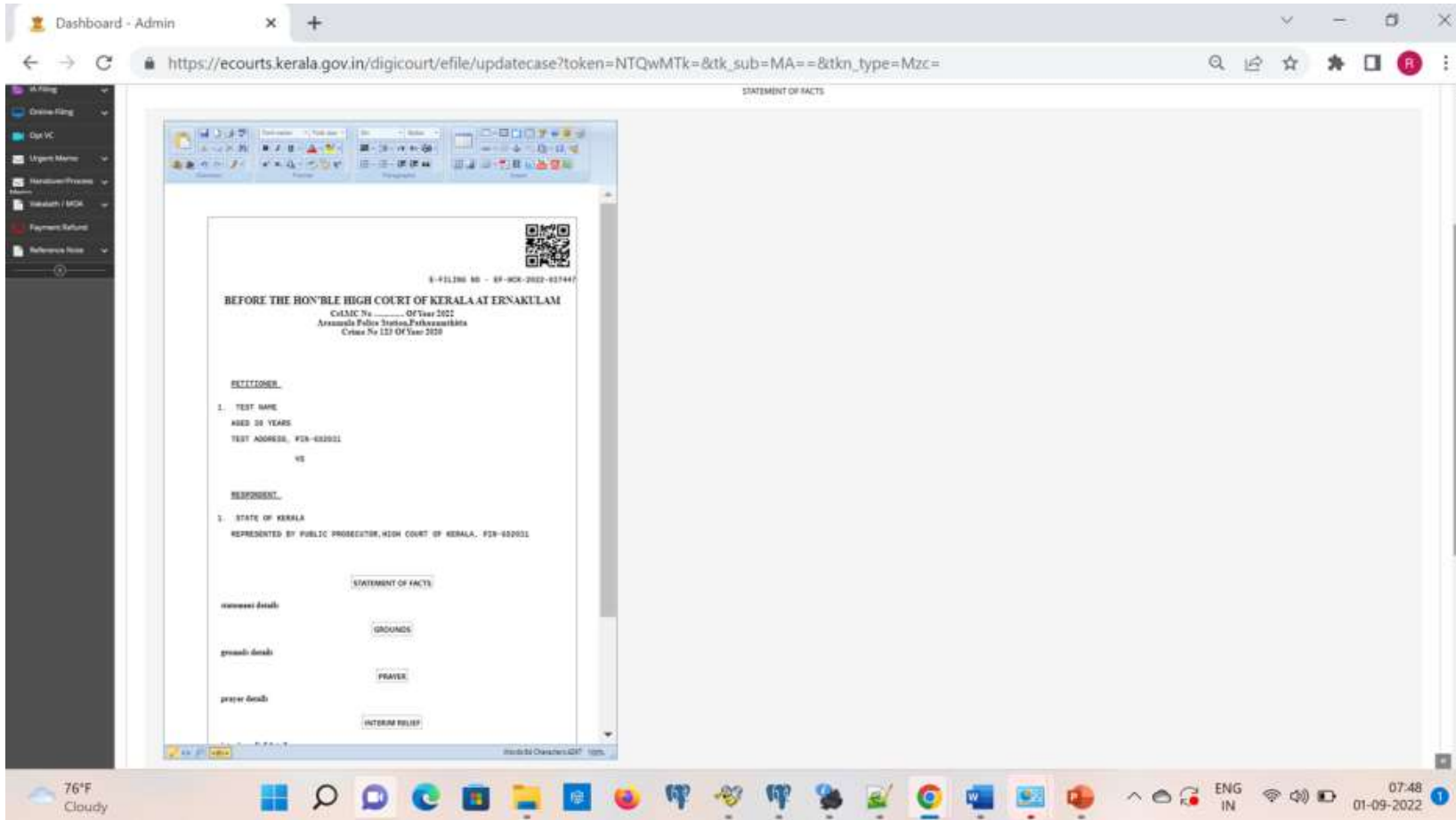
CNR NUMBER	CaseNo	Appl.No	View

Case Registration work flow

Case registration workflow in ecourts



It is enabled with features like web editor for entering Synopsis, Statement of facts ,Documents ,Petitions where most of the values are prefilled based on metadata



System automatically generates index based on the case file

Dashboard - Admin

https://ecourts.kerala.gov.in/digicourt/efile/updatecase?token=NTQwMTk=&tk_sub=MA==&tkn_type=Mzc=

INDEX

E-FILING NO - SF-HC-2022-027447

BEFORE THE HONOURABLE HIGH COURT OF KERALA AT ERNAKULAM

Case No. _____ of Year 2022

PETITIONER - TEST NAME
V/S
RESPONDENT - STATE OF KERALA

INDEX

Sr. Title	Description	Page No.
1. Summons		1-2
2. Statement of Facts		3-4
3. Affidavit	Affidavit	5-6
4. ACCEPT ADDITIONAL AFFIDAVIT		7-8
5. SUBAO OF APPEARANCE		11

INDEX

E-VERIFIED

TEST

KL-000100

76°F Cloudy

07:56 01-09-2022


System automatically generates docket based on the metadata

The screenshot shows a web browser window with the following details:

- Browser Tab:** Dashboard - Admin
- URL:** https://ecourts.kerala.gov.in/digicourt/efile/updatecase?token=NTQwMTk=&tk_sub=MA==&tkn_type=Mzc=
- Left Sidebar:** Contains navigation items: "Dashboard / Process", "Vakalat / MCA", "Payments Status", and "Reference Note".
- Main Content Area:** Displays a document template for a court filing. It includes:
 - A QR code in the top right corner.
 - E-FILE NO - EF-NDP-2022-027447
 - COURT NAME: BEFORE THE HON'BLE HIGH COURT OF KERALA AT ERNAKULAM
 - CIVIL No. _____ Of Year 2022
 - Arrested Police Station/Parishramakkettu
 - Crime No. 123 Of Year 2020
 - SECTIONAL N.C.
 - PETITIONER
 - 1. TEST NAME
 - VS
 - RESPONDENT
 - 1. STATE OF KERALA
 - FILING NATURE - ORDINARY
 - PAYMENT MODE - OFFLINE / AMOUNT - 0
 - REGISTERED PUBLIC PROSECUTOR
 - FILED BY
 - 1. TEST
 - IN E-VERIFIED TEST KL-0000000
- Bottom Buttons:** "REGENERATE" and "SAVE DOCKET" (highlighted in green).

The Windows taskbar at the bottom shows the system tray with a temperature of 76°F Cloudy, the date 01-09-2022, and the time 07:58. The language is set to ENG IN.

- Docket (Page No-1)
- Index (Page No-1)
- Synopsis 1 (Page No-1)
- Synopsis 1 (Page No-2)
- Statement Of Facts 1 (Page No-1)
- Statement Of Facts 1 (Page No-2)
- Statement Of Facts 1 (Page No-3)
- Statement Of Facts 1 (Page No-4)
- Statement Of Facts 1 (Page No-5)
- Affidavit (Page No-1)
- Exhibit P1 (Page No-1)
- Exhibit P2 (Page No-1)
- Vakalatnama (Page No-1)



E-FILING NO - EF-HCK-2022-039001

Sub-Article 226-SARFAESI & RDBFI ACT-INSTALMENT & ALLIED RELIEFS
BEFORE THE HON'BLE HIGH COURT OF KERALA AT ERNAKULAM
 WP(C) No Of Year 2022

178.10 SARFAESI & RDBFI ACT

PETITIONER
 [Redacted]

VS

RESPONDENT
 [Redacted]

**MEMORANDUM OF WRIT PETITION(CIVIL) FILED UNDER
 ARTICLE 226 OF THE CONSTITUTION OF INDIA**

HIGH COURT OF KERALA

FILING NATURE : URGENT
 FEES PAID & STATUS - 222 (SUCCESS)
 SERVED ON N RAGHURAJ

FILED BY
 1. M [Redacted]
 2. P [Redacted]

Sd/-
 EVERIFIED
 [Redacted]

FSO VERIFIED -12

Data authenticity steps

- ▶ FSO scrutiny to validate the metadata and case file data is same.
- ▶ Only after scrutiny, the metadata is pushed from ecourts database to CMS database
- ▶ QR code is embedded on the Case docket and Index
- ▶ Watermarking of case file with Highcourt emblem
- ▶ Adding FSO verified stamp with FSO ID once case is scrutinized

Presented on :29-08-2022 WP(C) 28068/2022-Docket



E-FILING NO - EF-HCK-2022-039001

Sub:Article 226-SARFAESI & RDBFI ACT-INSTALMENT & ALLIED RELIEFS
BEFORE THE HON'BLE HIGH COURT OF KERALA AT ERNAKULAM
WP(C) No Of Year 2022.

178.10 SARFAESI & RDBI ACT

PETITIONER

VS

RESPONDENT



FSO VERIFIED -12

WP(C) 28088/2022-Index



BEFORE THE HONOURABLE HIGH COURT OF KERALA AT ERNAKULAM
WP(C) No Of Year 2022

Epay

- ▶ EPAY facility is used to collect the fees and deposit the same into different heads of accounts in the treasury
- ▶ Supports multiple payment methods such as net banking, UPI payments, card payment



e-Treasury Government of Kerala

Select Payment Option



Net Banking (Direct)



Payment Gateway 1 (New)
Preferred



Payment Gateway 2

Select Bank



Federal Bank



State Bank of India



Canara Bank



Bank of Baroda



Bank of India



IDBI Bank



INDIAN BANK



Indian Overseas Bank



Punjab National Bank



Union Bank of India



e-Treasury Government of Kerala

Select Payment Option



Net Banking (Direct)



Payment Gateway 1 (New)
Preferred



Payment Gateway 2



Card Payment (Debit/Credit)



UPI Payment



Retail Banking (Others) & Bharat QR Code



Corporate Banking (Others)

Proceed for Payment

Cancel

- Certified Copy
- Counter/Document
- Court Display
- IA Filing
- Online-Filing**
 - New Case
 - Quick-e-Filing
 - Normal-Filing
 - Draft Case
 - My Case
 - Defective Cases
 - Balance Payment
 - Verify Payments
 - Quick e-Filing
 - Amendment
 - Opt VC
 - Urgent Memo
 - Handover/Process
 - Vakalath / MOA
 - Payment Refund
 - Reference Note

E-PAYMENT

Whether Certified Copy of Lower court order produced? Yes No

Court Fees :	0
Vakalath Fees	
Vakalath Court Fee :	0
Legal Benefit Fund Stamp :	0
Advocate's Clerks Welfare Fund :	0
Advocate's Welfare Fund :	0
Advocate Association :	0
Vakalath Fees Total	0
Memo of Appearance Fees	
Advocate's Clerks Welfare Fund :	12
Advocate's Welfare Fund :	45
Advocate Association :	5
Memo of Appearance Total	62
HC Document Fee	0
Total	62

Once your payment is successful, please click verify payment before doing further payment.

PROCEED TO PAY VIA E-TREASURY

VERIFY PAYMENT

PROCEED WITH OFFLINE PAYMENT

Verify Payment

Online Application - The High Co x

https://ecourts.kerala.gov.in/digicourt/Etreasury/efile_verificationlist

High Court of Kerala

Home > Etreasury

Select E-Filing No :

- Select-
- EF-HCK-2022-032721
- EF-HCK-2022-032747
- EF-HCK-2022-033108
- EF-HCK-2022-033420
- EF-HCK-2022-033477
- EF-HCK-2022-033529
- EF-HCK-2022-033548
- EF-HCK-2022-033847
- EF-HCK-2022-033881
- EF-HCK-2022-034120
- EF-HCK-2022-034867
- EF-HCK-2022-035423
- EF-HCK-2022-035832
- EF-HCK-2022-036460
- EF-HCK-2022-037316
- EF-HCK-2022-037317
- EF-HCK-2022-037319
- EF-HCK-2022-037447
- EF-HCK-2022-037541
- EF-HCK-2022-038494

© 2019. All rights reserved to High Court of Kerala.
Site Designed, Developed by High Level IT Cell, High Court of Kerala

75°F Cloudy

07:24 01-09-2022

Online Application - The High Co x

https://ecourts.kerala.gov.in/digicourt/Etreasury/efile_verificationlist

High Court of Kerala

Welcome, TEST SRI. SMT...

Home > Etreasury

Select E-Filing No : EF-HCK-2020-001792

PAYMENT DETAILS

PAYMENT HISTORY - EF-HCK-2020-001792

No	Date	GRN NO	Paid Amount	Status	Action
1	14-07-2020 11:31:44	KL004697929202021E	67	Success	Verify
2	05-04-2022 14:01:44		10	Pending	Verify

© 2019. All rights reserved to High Court of Kerala.
Website Designed, Developed by High Level IT Cell, High Court of Kerala

76°F Cloudy

07:26 01-09-2022

Your previous payment was successful.

Please do not refresh the page. Close this window and proceed.

GRN	KL004697920202021E
CHALLANTIMESTAMP	2020-07-14 11:59:17.645120
BANK_REFNO	T20196115957PT848
CIN	20196115957376
BANKTIMESTAMP	2020-07-14 12:04:16.000000
AMOUNT	67.00
STATUS	Success
REMARKS	SUCCESS
REMARK STATUS	
BANK_CODE	FBL

Balance Payment

Online Application - The High C... x

https://ecourts.kerala.gov.in/digicourt/Etreasury/efile_balancepay

Home > Breakup

Select Filing No.: 8140K2022010217

Fee Type	Fee	Paid
Court Fee:	0	0
Adv. Appt Court Fee (2 Hal):	20	0
Memo of Appearance Fee:	0	0
Advocate's Clerk Welfare Fund:	0	0
Advocate's Welfare Fund:	0	0
Advocate Association:	0	0
Memo of Appearance Total:	0	0
Wakalat Fee:	0	0
Court Fee:	0	0
Legal Benefit Fund Stamp:	0	0
Advocate's Clerk Welfare Fund:	0	0
Advocate's Welfare Fund:	120	0
Advocate Association:	19	0
Wakalat Fees Total:	172	0
LC Document Fee & Document Court:	0	0
Admission Release Fee:	265	0
LC Document Fee:	0	0
Total Fee:	442	0
Balance Total Amount:	437	

PROCEED TO PAY VIA THE BANK

76°F Cloudy

07:34 01-09-2022

Paperless courts

- ▶ All in one- touch machine: The transition from paper to digital screen emphasizes the true vision of a paperless courtroom and The High Court of Kerala is pioneering the mission with installing state of the art 'all in one- touch machines' for Honorable Judges and advocates.
- ▶ Case display system :The case display system provides a single reference point for the advocate/party in person to check the case calling details of all the courts.

- ▶ Virtual Hearing with Hybrid facility : The option to attend the case either physically or virtually opens up an array of opportunities for the advocates to cater to their different cases happening in different courts on the same day without being present in each court physically.
- ▶ The Online Dashboard facility enables case file view by Judges, Advocates, PS to Judge, PA to Judge, Party in Person, Standing Counsel, Central Government Counsel, State Government Pleader, Public prosecutor, Filing Scrutiny Officer, Section Assistant, Section Officer, Assistant Registrar etc.

Judge Display

Thu Sep 01 2022 10:19:41

Refresh Dashboard Today's Causelist

No	Court	Bench	List Type	Item	Case No	Party Details	Advocates	Purpose	Mode	Grid View	Flip View
1	4D	MR. JUSTICE [REDACTED]	Avoid List Paperless	11	WP(C) No.28502/2022	Versus	[REDACTED]	ADMISSION	ONLINE	Case File	Main File

Grounds Prayer Interim Relief Defect Details Annotate

Judge Note Order Summary Order Sheet Hearing History Interim Orders

Section Uploads Section Endorsement Reference Note

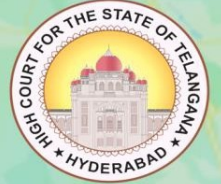
Manupatra Westlaw KHC Online KLT Online

SCC Online e-Granthalaya HC Judgements HC Library

Case Display System

Thu Sep 01 2022 10:39:24

CJ	2	1A	18	1B	-----	1C	212
2A	-----	2B	-----	2C	-----	2D	-----
2E	20	3A	303	3B	6	3C	-----
3E	5	4A	402	4D	10	5A	-----
5B	-----	5C	6	5D	201	6A	1
6B	1	6C	7	6D	1	7A	7
7B	8	7C	4	7D	6	7E	-----
8A	2						



NSTEP

(National Service and Tracking of Electronic Process)

USER MANUAL

Subordinate Courts for the State of Kerala.

NSTEP

(National Service and Tracking of Electronic
Processes)

User Manual

Table of Contents

CHAPTER - I.....	1
Introduction to NSTEP.....	2
Advantages:.....	4
Process Life Cycle:.....	5
Process/Summons Generation.....	5
PROCESS GENERATION TEMPLATES IN CIS 3.2 (STEP BY STEP).....	5
Process Status Monitoring.....	11
Upload Process:.....	12
CHAPTER – II.....	17
Process Allocation through NSTEP:.....	18
State Level Activity:.....	18
District Level Activity:.....	18
User ID creation for Process Administrator (Nazir).....	19
Bailiff Master Creation.....	20
User ID creation for Bailiff:.....	20
Process Establishment Allocation.....	21
Area Master:.....	22
Tag Bailiff/Process Server to Process Admin.....	22
Process Admin Login.....	23
NSTEP DASH BOARD:.....	23
Consume Data:.....	24
Process Allocation.....	24
Process De-allocation.....	25
Bailiff Process Transfer:.....	25
Process Delivery:.....	26
Process Status:.....	26
Consume Data Previous Year:.....	27

<u>CHAPTER – III.....</u>	<u>28</u>
<u>Service of Electronic Process through NSTEP Application.....</u>	<u>29</u>
<u>Process Service:.....</u>	<u>30</u>
<u>Side Menu.....</u>	<u>33</u>
<u>Upload.....</u>	<u>34</u>
<u>Delete.....</u>	<u>34</u>
<u>Logout:.....</u>	<u>35</u>

**ANNEXURE-I: Amendment to Civil Rules of Practice and Circular Orders, 1980 -
Insertion of new Rule in Chapter VII-A, after Rule 82 of Civil Rules of Practice and
Circular Orders, 1980 as Rule 82-A regarding Electronic Process Service Rules**



CHAPTER - I

Introduction and Generation of Process through CIS

Introduction to NSTEP:

The service of summons and processes by traditional methods are often a cause for inevitable delay in speedy disposal of cases. NSTEP is a centralised process service tracking application comprising of a web application and a complementary mobile app designed to streamline the process. NSTEP Mobile App provided to bailiffs and process servers enable transparent tracking of service of notices and summons in real-time. Once the process is adopted through CIS software by the respective courts, it will become available on the NSTEP web application in the electronic format. NSTEP web application enables allocation of published processes to bailiffs if service is to be effected within their jurisdiction. It also facilitates allocation of published processes to respective court establishments inter-district or inter-state.

The bailiffs can view the allocated processes on the NSTEP Mobile App. The Android smartphones will be provided to bailiffs which are integrated with the court's service modules. The Bailiffs can capture GPS location, photo of the receiver or premises (where none is available to be served), the signature of the receiver and on the spot recordal of reasons for service not being effected. The data captured is instantly communicated to the central NSTEP application. From NSTEP web application data is then sent forward to CIS, enabling courts to track the status of service. NSTEP thus accomplishes the following significant goals:

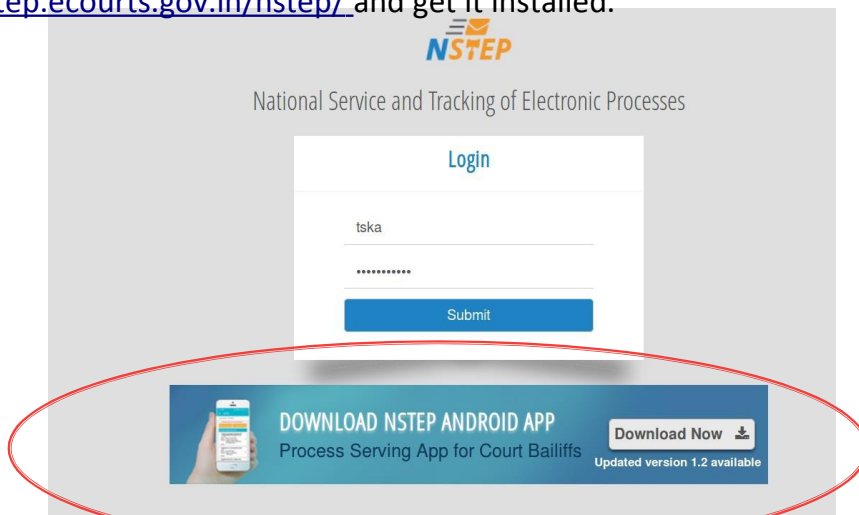
- Enables serving of Notice/Summons in electronic form
- Posting and recordal of real time updates from remote locations reducing inordinate delays in process service
- Time required for serving Inter-district or Inter-state process by Post is drastically reduced by serving it in electronic form
- Transparent tracking of service of process and summons by all stakeholders
- GPS connectivity with Bhuvan Maps (India's geo-platform developed by ISRO)



CIS (Case Information System) software is deployed across all Courts in India. CIS provides facility to generate electronic processes in PDF format. Once the electronic processes are generated, process admin (Nazir) of the respective court will assign the delivery of processes to Bailiffs.

To view list of processes allocated to him, Bailiff must have Smartphone with NSTEP Application installed.

For NSTEP Application, we need to download **NSTEP.apk** file from the given link <http://nstep.ecourts.gov.in/nstep/> and get it installed.





Advantages:

- 1) By using this NSTEP Application, Process Admin's (Nazir) can easily consume the data published by respective Court's and will flexibly allocate the Process to concerned Process Servers/Bailiffs and the burden of maintaining several registers can be avoided in future.
- 2) e-Courts Project was mainly designed to give more access, to the information relating their cases, to the Public. Along with that NSTEP application is designed for speedy and uninterrupted service of Process either through Online or Offline Modes and, the concerned parties can also access the information pertaining to the date of issuance of Process on the concerned party on the e-Court website.
- 3) Earlier, few difficulties have been faced by the Judicial Officers in getting the Status of the Summons/Warrants issued and in some instances the Bench Proceedings were halted until the Process Server/Bailiff's Report was filed, in order to proceed further with the cases. With the introduction of NSTEP Application, the Judicial Officers and Staff can easily access the information pertaining to date of issuance of Process, Date of Service of Process, Reasons for not serving the said Process etc., by one click i.e., by opening the particular case in the C.I.S.
- 4) By using NSTEP application, the Process Servers/Bailiffs will directly Serve the Process on the concerned person and capture the digital signature and photograph of the recipient, so that in future the person on whom the said Process was served cannot deny the same in order to deviate the case and take advantage of such doubtful Service of Process.
- 5) This NSTEP Application, guards the Process Servers/Bailiff's as an Protective shield, even in the event of denial of Service of Summons/Warrants by the concerned parties, since the data regarding the Service of such Process which were served, will already be stored in the Server such as Signature, Photo and location of the person on whom the Summons/Warrants were served.
- 6) By using this Application, Summons can be sent to any of the Court Complexes either within the State or Outside the State by clicking on the respective Court name of particular District in that State. This will save the inordinate delay in sending the Summons to other District and States in transit.



Process Life Cycle:

There are three stages in the process life cycle, they are: Process Generation (through CIS 3.2), Process Allotment (by Nazir) and Process Service (through NSTEP Mobile Application). Let's explore these one by one.

Process/Summons Generation:

The feature of Auto Generation of Process/Summons is a path breaking option available in NC CIS 3.2 and the Online Process Generation have four different components i.e.,

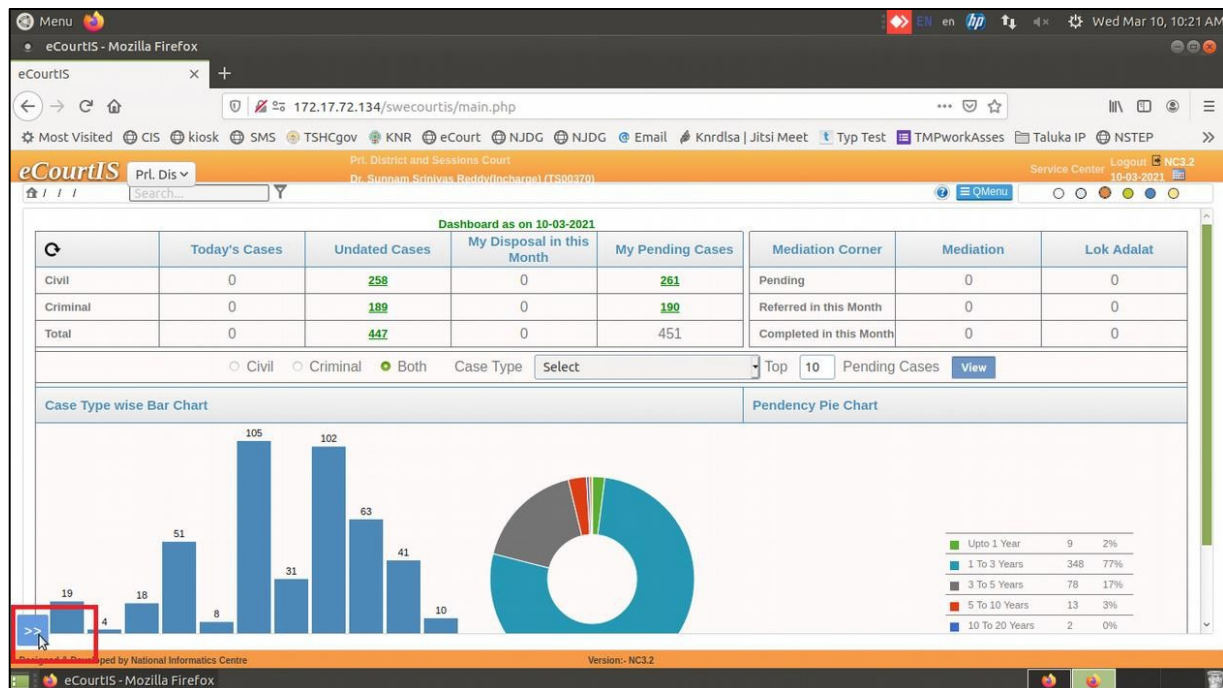
1. Process Generation (Draft Generation)
2. Publish Process
3. Process/Summons Print and Acknowledgement
4. Process Status Monitoring.

PROCESS GENERATION TEMPLATES IN CIS 3.2 (STEP BY STEP)

Generating Process/Summons options are available under **Case Proceedings - Process Generation** Option in **Show Menu**.

After a successful login into CIS 3.2, below screen will appear.

Select the **Civil-Criminal** Process option from Show Menu **Case Proceedings** option.



Screen 1



The screenshot shows the eCourtIS web application interface. The browser address bar displays the URL `172.17.72.134/swecourtis/main.php`. The page header includes the text "Pr. District and Sessions Court" and "Dr. Sunnam Srinivas Reddy(Incharge) (TS00370)". The left sidebar menu is expanded, and the "Case Proceedings" option is highlighted with a red rectangular box. Other menu items visible include "Fees", "I-Court Fees", "Registration Section", "Case Allocation", "Select Date", "Daily Proceedings", "Order and Judgment", "IA Filing For Court User", "Civil-Criminal Process", "Work Done Sheet", "A Diary", "Dormant/SineDie", "Not/P.H. Before Me", "B Diary", "Balance Court Fee", "Framing of Issues/Charge", and "Unlinked Cases". The footer of the page shows the URL `172.17.72.134/swecourtis/includes/parentlink.php?linkid=179` and the version "NC3.2".

Screen 2

The screenshot shows the eCourtIS web application interface. The browser address bar displays the URL `172.17.72.134/swecourtis/main.php`. The page header includes the text "Pr. District and Sessions Court" and "Dr. Sunnam Srinivas Reddy(Incharge) (TS00370)". The left sidebar menu is expanded, and the "Civil-Criminal Process" option is highlighted with a red rectangular box. The sub-menu items under "Civil-Criminal Process" are visible: "Process Generation", "Copy Previous Process", "Upload Process", "Publish Process", "Process Acknowledgement/Print", and "Process Status". Other menu items visible include "I-Court Fees", "Registration Section", "Case Allocation", "Case Proceedings", "Select Court", "Select Date", "Daily Proceedings", "Order and Judgment", "IA Filing For Court User", "Work Done Sheet", "A Diary", "Dormant/SineDie", and "Not/P.H. Before Me". The footer of the page shows the URL `172.17.72.134/swecourtis/main.php?linkid=265&mode=0` and the version "NC3.2".

Screen 3



Menu

eCourtIS - Mozilla Firefox

172.17.72.134/swecourtis/main.php

Most Visited CIS kiosk SMS TSHCGov KNR eCourt NJDG NJDG Email Knrdlsa | Jitsi Meet Typ Test TMPworkAsses Taluka IP NSTEP

eCourtIS Prl. Dis

Pr. District and Sessions Court
Dr. Sunnam Srinivas Reddy(Incharge) (TS00370)

Service Center Logout NC3.2
24-03-2020

Home

Case Proceedings / Process Generation / Add

Civil - Criminal Process

Civil Criminal Plead Guilty *Case No.: OS/122/2016

* Process: Summons in a summary suit [0.37, 1]

Next Date:30-09-2020 Purpose:STAY

Select Addressee

Fees Type: Paid Free/On Court Motion

Process Fees:

Addressee Type: Defendant

* Addressee Name: 1 - Sama Vijaykumar (R) ...

Footnote:

Nature:

- 1 - Sama Vijaykumar (R)
- 2-MONEY
- 3-DECLARATION
- 4-INJUNCTION
- 5-PARTITION
- 6-SPECIFIC PERFORMANCE
- 7-DAMAGES

Save

Designed & Developed by National Informatics Centre Version: NC3.2

Screen 4

eCourtIS - Mozilla Firefox

njdg.ecourts.gov.in/njdg | Naglos: 10.160.8.3 | eCourtIS

localhost/swecourtis/main.php

CIS Kiosk NJDG DC HC eDC Email Local LKiosk Gmail XLS to JPG WA NSTEP WMS SMSV3 TCIS TKiosk TsmsV3 Naglos

eCourtIS Prl. Dis

Pr. District and Sessions Court
Dr. Sunnam Srinivas Reddy(Incharge) (TS00370)

Service Center Logout NC3.2
10-03-2021

Home

Case Proceedings / Process Generation / Add

Civil - Criminal Process

Civil Criminal Plead Guilty *Case No.: Select

* Process: Select

Sidebar:

- Caveat Registration
- Fees
- I-Court Fees
- Registration Section
- Case Allocation
- Case Proceedings
 - Select Court
 - Select Date
 - Daily Proceedings
 - Order and Judgment
 - IA Filing For Court User
 - Civil-Criminal Process
- Process Generation
 - Copy Previous Process
 - Upload Process
 - Publish Process
 - Process
 - Acknowledgement/Print
 - Process Status
- Work Done Sheet
- A Diary
- Dormant/SineDie
- Not/P.H. Before Me
- B Diary
- Balance Court Fee
- Framing of Issues/Charge
- Linked Cases
- Index Register
- Reports

Screen 5



Select the case number for which, **Process/Summons** is to be generated, and fill all the required details.

Process generated as on Date (1) Process Draft (1)

Select Addressee Addressee Details

Address Name: Sama Vijaykumar

Relation: Fath R/O: Shankaraiah

Address: Main Address Alternate Address

State: TELANGANA

Town: Select

Taluka: Karimnagar

Police Station: Select

Pin code: 505001 Mobile No.: Email:

0 Out of 1 Update

Address: Ro. H.No. 8-5-339, Raghavendernagar, Karimnagar.

District: KARIMNAGAR

Ward: Select

Village: Select

Remarks:

Save

Screen 6

After filling all the details click the **Generate Draft** option.

Process ID :Summons in a summary suit [0.37, R. 2]-100004

Footnote : Fees Type: Paid Nature 1-TITLE Process Fees:

Addressee Name : Sama Vijaykumar

Address Type : Main. Address: Ro. H.No. 8-5-339, Raghavendernagar, Karimnagar.

State : TELANGANA District: Karimnagar

Town : Ward:

Taluka : Village:

Police Station : Remarks :

Pin code : Mobile No.:

Email : R/O: Shankaraiah

Suit Filed for Recovery of Rs. : Amount of Cost. :

Generate Draft

Screen 7

After Successful Draft generation, go to the **Publish Process** option from the **Show Menu** and click on the **Publish** option like shown in the below screen.

Screen 9

Pr. District and Sessions Court
Dr. Sunnam Srinivas Reddy(Incharge) (TS009770)

Home / Case Proceedings / Publish Process / [Search...]

Notices Published successfully

*From Date 01-03-2020 *To Date 24-03-2020 [Go]

Show 10 entries Previous 1 Next

Sr. No.	Date	Case No	Main Party	Notice	Party Name	Draft	Publish
1	24-03-2020	OS/122/2016	Paida Gangadhar V.S Sama Vijaykumar	Summons for disposal of suit [O. 5, R. 1, 5.]	Sama Vijaykumar	Show/Delete	Publish
2	17-03-2020	OS/159/2016	Koduri Shakunthala @ Suguna V.S Guntuka Gopaiah @ Gopal	Summons to appear in person [O.5, R. 3]	Guntuka Gopaiah @ Gopal	Show/Delete	Publish
3	16-03-2020	EP/74/2017	K Arun Kumar V.S R19 Bolgam Suresh Kumar	Notice to show cause why a payment or adjustment should not be recorded as certified [O. 21. R. 2]	R19 Bolgam Suresh Kumar	Show/Delete	Publish

Showing 1 to 3 of 3 entries Previous 1 Next

Designed & Developed by National Informatics Centre Version:- NC3.2

Screen 10

After Successfully Publishing the Process it will be pushed into **NSTEP** portal which is operated by Nazir Section.

To print the Generated Process/Summons go to the **Process Acknowledgement/Print** option from Show Menu and click on the shown link to print the Process/Summons.

Pr. District and Sessions Court
Dr. Sunnam Srinivas Reddy(Incharge) (TS009770)

Home / Case Proceedings / Process Acknowledgement/Print / [Search...]

Print/Acknowledgement

*From Date 24-03-2020 *To Date 24-03-2020 [Go]

Process Date	Process ID	Notice	Party Name	Print	Check For Acknowledgement
Case No.: OS/122/2016 Main Party: Paida Gangadhar Vs Sama Vijaykumar					
24-03-2020	PTSKA000010772016_1_1	Summons in a summary suit [O.37, R. 2]	Sama Vijaykumar, Ro. H.No. 8-5-339, Raghavendernagar, Karimnagar.	Print	<input checked="" type="checkbox"/> Acknowledge

Designed & Developed by National Informatics Centre Version:- NC3.2

Screen 11



Process Status Monitoring

The status of the process can be monitored using the **Process Status** option.

This option will be enabled once a Process, which is generated in CIS package, is consumed by the Nazarath Section in the NSTEP portal, and the section has updated the status of the Process in the portal.

Select **Process Status** option from Show Menu it will show all the details of Process Status i.e., All, Pending, Served and Un-Served.

We can also find the Signature, Photograph and Navigation Map uploaded by the Bailiff/Process Server while Serving the Process/Summons belonging to a particular case.

Sr. No.	Case No.	Process Id/Process title	Receiver Name	Receiver Address	Publish Date	Nstep Status	View Details
1	MVOP/263/2020	PTSKA000011932020_2_1 Notice / Summons under Motor Accident Claim Petition []	Abdul Azeemuddin	R/o.H.No.3-1-116/179, Ovatasi Nagar, Bahinsa, Nirmal District Pin Code No.504103 (Old District Adilabad) (Telangana State)	02-03-2021	Bailiff Name: Bathini Sai Bhushan. Delivery Date: 05-03-2021. Reason: పండ్ల కేసు ఉంటుంది. Remark: .	View Photo View Signature View Map
2	MVOP/263/2020	PTSKA000011932020_2_2 Notice / Summons under Motor Accident Claim Petition []	Mujebeuddin	R/o.H.No.1-1-894, Bodhan Road, Nizamabad town and District Pin Code:503001	02-03-2021	Bailiff Name: Bathini Sai Bhushan. Delivery Date: 05-03-2021. Reason: పండ్ల కేసు ఉంటుంది. Remark: tested.	View Photo View Signature View Map

Screen 12

Sr. No.	Case No.	Process Id/Process title	Receiver Name	Receiver Address	Publish Date	Nstep Status	View Details
1	MVOP/263/2020	PTSKA000011932020_2_1 Notice / Summons under Motor Accident Claim Petition []	Abdul Azeemuddin	R/o.H.No.3-116/179, Ovatasi Nagar, Bahinsa, Nirmal District Pin Code No.504103 (Old District Adilabad) (Telangana State)	02-03-2021	Bailiff Name: Bathini Sai Bhushan. Delivery Date: 05-03-2021. Reason: పండ్ల కేసు ఉంటుంది. Remark: .	View Photo View Signature View Map
2	MVOP/263/2020	PTSKA000011932020_2_2 Notice / Summons under Motor Accident Claim Petition []	Mujebeuddin	R/o.H.No.1-1-894, Bodhan Road, Nizamabad town and District Pin Code:503001	02-03-2021	Bailiff Name: Bathini Sai Bhushan. Delivery Date: 05-03-2021. Reason: పండ్ల కేసు ఉంటుంది. Remark: tested.	View Photo View Signature View Map

Screen 13



Upload Process:

While generating the Process, in some cases, for some **Process Types** the draft will not be generated in PDF format, it will be generated in ODT format. In this scenario we have to download the ODT file and convert it into PDF and then upload the Process using **Upload Process** option from Show Menu.

For example in case type EP for Process Type: **'Order to attach salary of public officer'**, the procedure is explained in the following screenshots to Upload Process.

The screenshot displays the eCourtIS web application interface. The main content area is titled "Civil - Criminal Process". The "Case No." field is set to "EP/278/2018". The "Process" dropdown menu is open, showing a list of process types. The "Order to attach salary of public officer... [O. 21, R. 48] -1000031" option is highlighted in orange. The interface includes a sidebar with navigation options like "Configure Establishment", "User Menu", "Master", "Unification", "Admin Menu", "Filing Counter", "Appeal Filing", "Caveat Registration", "Fees", "I-Court Fees", "Registration Section", and "Case Allocation". The footer of the application indicates it is "Designed & Developed by National Informatics Centre" and "Version: NC3.2".

Screen 1



Browser: Mozilla Firefox | URL: localhost/swecourtis/main.php | Page: Civil - Criminal Process

Case No.: EP/278/2018
Process: Order to attach salary of public off-
Next Date: 15-10-2020 Purpose: AWAIT REPORTS

Select Addressee | Addressee Details

Addressee Name: Enagandula Odelu
Relation: Select R/O :
Address: Main Address / Alternate Address
State: TELANGANA
District: KARIMNAGAR
Town: Select
Ward: Select
Taluka: Select
Village: Select
Police Station: Select
Pin code: Mobile No.:
Email: Remarks:

0 Out of 1 Update
Address: R/o.H.No.2-4, Kunaram Road, Mandal and District.Peddapalli

Save

Screen 2

Browser: Mozilla Firefox | URL: localhost/swecourtis/main.php | Page: Civil - Criminal Process

Case No.: EP/278/2018
Process: Order to attach salary of public off-
Next Date: 15-10-2020 Purpose: AWAIT REPORTS

Select Addressee

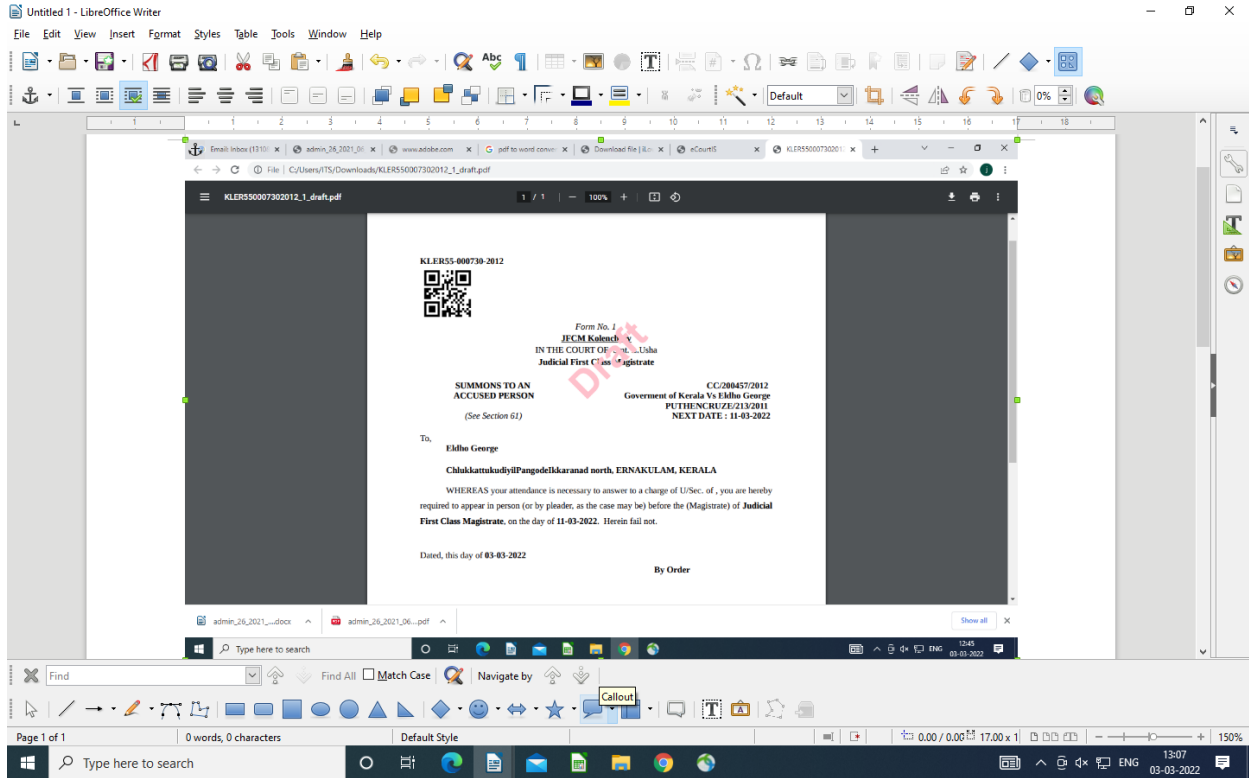
Fees Type: Paid / Free/On Court Motion
Process Fees:
Addressee Type: Defendant
Address Name: 1 - Enagandula Odelu (R)
Footnote: Nature:

Save

Screen 3

The screenshot displays the eCourts portal interface. At the top, the browser shows the URL 10.162.51.239/swecourts/main.php. The portal header includes the eCourts logo, JFCM Kolenchery, Smt. L.Usha (KL00871), and user information for Super Admin. A sidebar on the left lists various menu items such as Home, Case Proceedings, and Proceedings Reports. The main content area features a form titled 'Upload Process' with a red error message: 'Failed To Upload Process... Already Exists'. The form contains several fields: Case No. (CC/200133/2017), Process (Summons to an accused person [Sec.]), Addressee Type (Both), Addressee Name (1 - Shijo (R)), Relation (Father), R/O (Thampi), Address (Main Address), State (KERALA), District (ERNAKULAM), Taluka (Kunnathunad), Police Station (KUNNATHUNADU), Pin code, Mobile No., Email, and Remarks. An 'Upload' section shows a file named 'NSTEP SOP.odt' with a 'Preview' link. A 'Submit' button is located at the bottom of the form. The footer of the page indicates it is designed and developed by the National Informatics Centre, version NC3.2.

After downloading the ODT file of Process/Summon, convert the file to PDF format and upload the Process through the **Upload Process** option from Show Menu.





Screen 8

After successfully uploading the process, we need to **Publish** the Process to push the Process/Summons in to the NSTEP Portal.



CHAPTER – II

PROCESS CONSUMPTION AND ALLOCATION THROUGH NSTEP PORTAL



Process Allocation through NSTEP:

Before using the NSTEP portal and app, and going through the procedure for consumption of a process, let's take a look at hierarchical levels of users and the steps taken to create User ID, Password Credentials in step-by-step manner as mentioned below:

1. State Level User
2. District Level User
3. Process Admin (Nazir) User

State Level Activity:

The Court Administrator is authorized to take care of this activity. The Court admin will create the **User IDs** and **Passwords** for the District Level Admin Users (District Admin), and the District Level Admin Users will in turn create IDs for Process Administrators and Bailiffs within their respective Districts.

User ID creation: To create a User ID, a unique structure is appended to the Username which is as follows:

Two Character State Code + Two Character of District Code

Example:

*For ErnakulamUnit **kler** is the user ID*

In the above example “**kl**” is the **State Code** and “**er**” is the Ernakulam **District Code/Unit code**.

District Level Activity:

This activity is taken care of by the District Administrator. The District Administrator will create the Process Administrator (Nazir) through User creation form and will add **Bailiffs** through **Bailiff Master Link**.



User ID creation for Process Administrator (Nazir)

Process Masters shall be prefixed with Establishment Code.
(i.e. 2 Characters State Code + 2 Characters of District + 2 Character Establishment Code (Hexa Decimal))

So that it remains unique throughout the Country.

Example:

KLER01 -- Process Administrator (Nazir-1)

KLER02 -- Process Administrator (Nazir-2)

These Process Administrators (Nazir) are tagged to particular Establishments for which they are connected.

NSTEP National Service and Tracking of Electronic Processes

Karimnagar District [District Admin] | Telangana Karimnagar

Search here

Process Masters < / User Management / User Creation / Add / Modify / Report

User Management >

User Creation

Year Initialization

End User

*Username: *Full Name:

*Password: *Confirm Password:

E-mail: e.g: abc[at]gmail[dot]com *Mobile No.:

Address:

*Role: Select



Bailiff Master Creation:

The screenshot shows the 'End User' creation interface in the NSTEP application. The form is titled 'End User' and contains the following fields:

- *Username: TSKA13
- *Full Name: M Varaprasad Rao
- *Password: [Redacted]
- *Confirm Password: [Redacted]
- E-mail: ecourts-tska13@indiancourts.nic
- *Mobile No.: 9002010004
- Address: JCJ Vemulawada
- *Role: Process Admin

A 'Submit' button is located at the bottom right of the form.

District Administrator will also create the Bailiff Master i.e. Bailiffs of the District.

User ID creation for Bailiff:

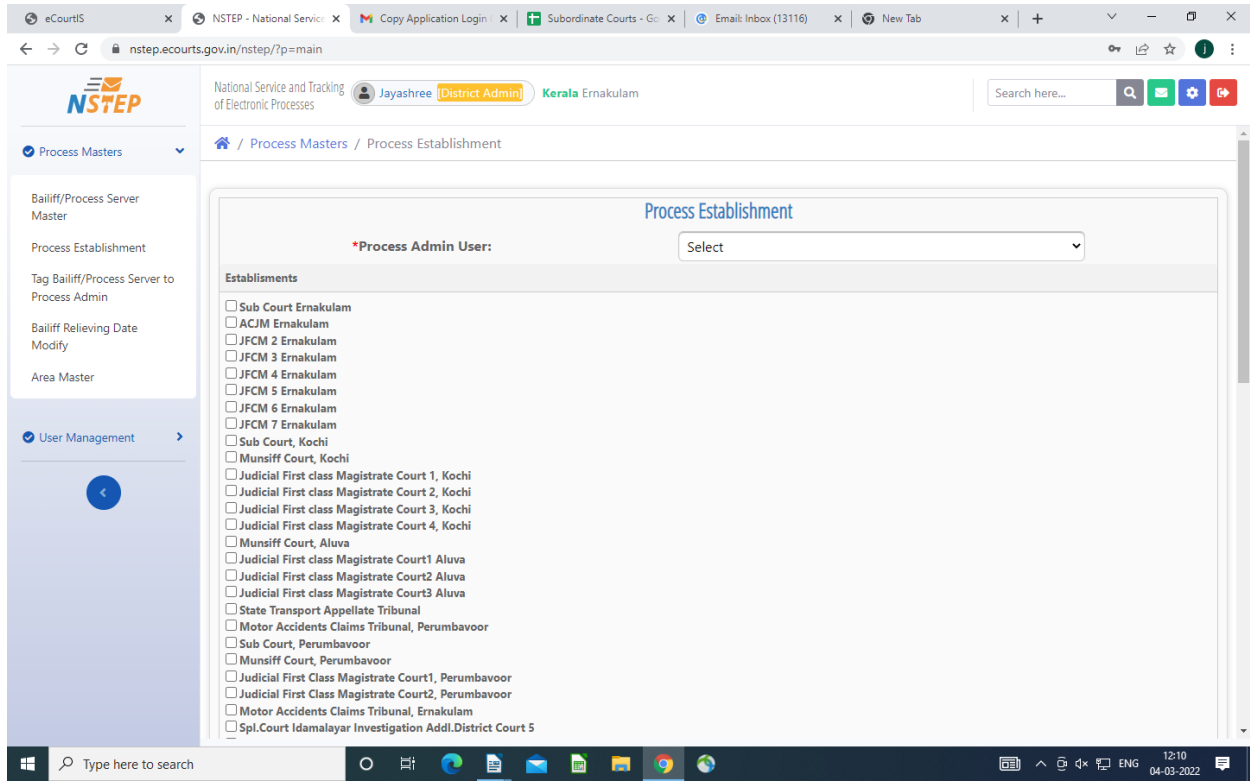
Bailiff code or Bailiff User id will start with State Code and District Code (i.e. 2 Characters State Code + 2 Characters of District followed by three digit number which is identical) so that it remains unique throughout the Country.

Example:

KLER001 - Bailiff (1)

KLER002 - Bailiff (2)

OTP will be the Password, we need to inform this to the Bailiff (No SMS will be sent).



Process Establishment Allocation:

Allocate the Establishments for Nazir to consume the Process

Area Master: Here we add the Areas in Area Master.

The screenshot shows the NSTEP web application interface. The user is logged in as Jayashree (District Admin) in Kerala, Ernakulam. The breadcrumb trail is: Process Masters / Area Master. The main content area is titled 'Area Master' and contains a form with the following fields:

- *Area ID: 2
- *Area: (empty text box)
- Submit button

Below the form, there is a table with the following data:

Area ID	Area Name	Edit	Delete
1	Ernakulam		

Additional UI elements include a 'Show 10 entries' dropdown, 'Hide Columns', 'PDF', 'Excel', and 'CSV' buttons, and pagination controls showing 'Showing 1 to 1 of 1 entries' with 'Previous', '1', and 'Next' buttons.

Tag Bailiff/Process Server to Process Admin:

Here we allocate the Bailiff/Process Servers to respective Process Admins (Nazir

The screenshot shows the NSTEP web application interface for the 'Tag Bailiff/Process Server To Process Admin' form. The user is logged in as Jayashree (District Admin) in Kerala, Ernakulam. The breadcrumb trail is: Process Masters / Tag Bailiff/Process Server to Process Admin / Add / Report. The main content area is titled 'Tag Bailiff/Process Server To Process Admin' and contains the following form fields:

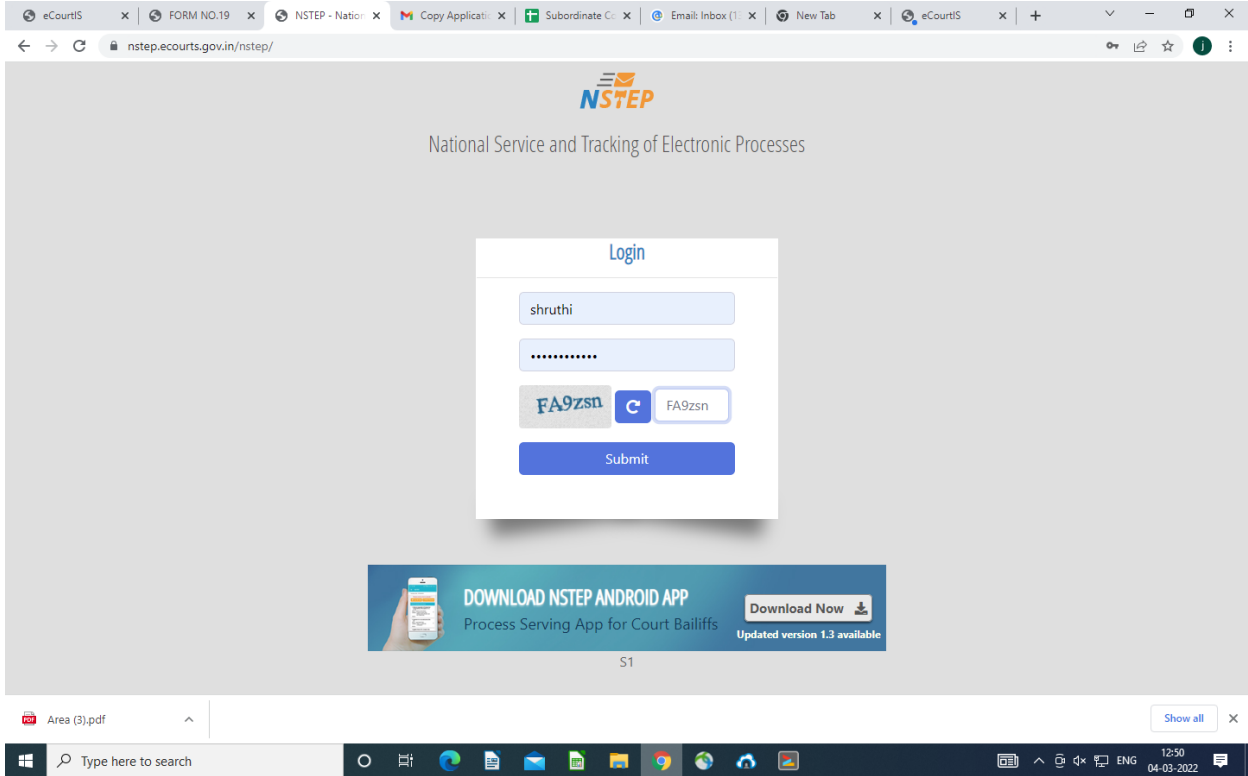
- *Process Admin: Jayashree Suresh (dropdown menu)
- Table with columns: Bailiff/Process Server Name, Joining Date, Relieving Date, and Process Area.
- Submit button

The table contains one entry:

Bailiff/Process Server Name	Joining Date	Relieving Date	Process Area
<input type="checkbox"/> Deepa	<input type="text"/>	<input type="text"/>	Select Ernakulam-1

Process Admin Login:

As of now District Admin Creates the Process Admin user and adds the Bailiff/Process Servers to Nazir. Now we have to login with Process Admin credential to allocate process to bailiffs.



NSTEP DASH BOARD:

Browser tabs: eCourtIS, FORM NO:19, NSTEP - Nation, Copy Applicati..., Subordinate Co..., Email: Inbox (1..., New Tab, eCourtIS

Address bar: nstep.ecourts.gov.in/nstep/?p=main

Logo: NSTEP

National Service and Tracking of Electronic Processes

User: Sruthy Soman (Process Admin) Kerala Ernakulam

Search here...

DASHBOARD

Pending Service Served Service Failed

Sr. No.	Establishments	Allocated Process To		Process Transfer To		Total
		Bailiff	Other Process Messenger	Within State	Outside State	
1	Munsiff Court, Kolenchery	0	0	0	0	0
2	Judicial First class Magistrate Court, Kolenchery	0	0	0	0	0
3	Munsiff Court Ernakulam	13	0	4	0	17
Total		13	0	4	0	17

Allocated to Users Pie chart

Category	Count	Percentage
Bailiff	13	70%
Other Process messenger	0	0%
Within State	4	24%
Outside State	0	0%

Establishment Bar chart

Establishment	Count
Kolenchery	0
Munnappur	0
Ernakulam	17

Allocated to Bailiff Bar chart

12

Allocated to Other Process Messenger Bar chart

0

Allocated to Other Establishment Within State

0

Allocated to Other Establishment Outside State

0

Area (3).pdf

Show all

Windows taskbar: Type here to search, 12:50, 04-03-2022

Consume Data:

The screenshot shows the NSTEP web application interface. The browser address bar displays `nstep.ecourts.gov.in/nstep/?p=main`. The user is logged in as Sruthy Soman (Process Admin) in Kerala Ernakulam. The sidebar menu is expanded to show 'Process Management' options, with 'Consume Data' selected. The main content area is titled 'Consume Data' and contains a table for selecting court establishments. The table has a 'Select' column and a 'Court Establishment' column. The 'Munsiff Court Ernakulam' row is checked. Below the table is a 'Pull' button.

Select	Court Establishment
<input checked="" type="checkbox"/>	Munsiff Court Ernakulam
<input type="checkbox"/>	Munsiff Court, Kolenchery
<input type="checkbox"/>	Judicial First class Magistrate Court, Kolenchery

Pull

Under Process Management Menu Select the Consume data to consume the Process published by the concern courts.

Select the Court Establishments and click on **Pull** button then all the selected establishments Process have consumed.

Process Allocation: Under Process Management Menu Select the Process Allocation to allocate the Process to Bailiffs.

Under Process Management Menu Select the Consume data to consume the Process published by the concern courts.

Select the Court Establishments and click on **Pull** button then all the selected establishments Process have consumed.

The screenshot displays the NSTEP web application interface. The top navigation bar shows the user is logged in as Sruthy Soman (Process Admin) in Kerala. The main content area is titled "Process Allocation" and includes filters for "Allocate to" (Civil Process, Criminal Process, Other Process Messenger, Within State, Outside State), "From Date" (01-03-2022), "To Date" (04-03-2022), and "Bailiff Name" (Satheesh (KLER005)). A table lists allocated processes with columns for Sr No, Process Id / Process Title, Case No., Designation Name, Addressee Name, Addressee Address, Email, Mobile, View Process, Edit, and Tag. The table contains one entry for process PKLER040000472021_4_1. A "Submit" button is located at the bottom of the table.

Sr No	Process Id / Process Title	Case No.	Designation Name	Addressee Name	Addressee Address	Email	Mobile	View Process	Edit	Tag
1	PKLER040000472021_4_1 Attachment In Execution Prohibitory Order, The Property Consist Of Money/Security In The Custody Of A Court/Public Officer[O.21 R.52]	RCP/300006/2021	Third Additional Munsiff(RCC)	TULASI DEVELOPERS INDIA PVT LTD REP BY MANAGING DIRECTOR THULASIDAS	8 522 B MAVELIPURAM NEAR SUN RISE HOSPITAL SEAPORT AIRPORT ROAD KAKKANADU KOCHI 682030 Kanayannur Emakulam KERALA			View	Edit	<input type="checkbox"/>

Process Allocation: Under Process Management Menu Select the Process Allocation to allocate the Process to Bailiffs.

Select the Bailiff Name from drop down list and Allocate a case details by tagging that particular case and click the **Submit** button at the end of the page.

Process De-allocation: Under Process Management Menu, Select the Process De-allocation Option to De-allocate the Processes which were already allocated to the Bailiffs concerned.

The screenshot displays the NSTEP web application interface for Process Deallocation. The user is logged in as Sruthy Soman (Process Admin) in Kerala Ernakulam. The main content area shows the 'Process Deallocation' section with options for Civil Process (selected) and Criminal Process. The 'Allocate to:' dropdown is set to 'Bailiff' and the 'Bailiff Name' is 'Satheesh (KLER005)'. The table below lists five processes for deallocation.

Sr No.	Process Title	Case No.	Designation Name	Process Id	Addressee Name	Addressee Address	Email	Mobile	Edit
1	Attachment in Execution(O.21 R.46]	OS/300155/2019	First Additional Munsiff	PKLER040002292019_55_2	Manoj Kochummen Mathai	Ponnola House, Thattarambalam P.O., Mattom North, Mavelikkara, Alappuzha rep by his POA Holder George P, S/o G Pappy, aged 63 Years, Mother Theresia Road, Pandavath, Maradu.			
2	Attachment in Execution(O.21 R.46]	OS/300357/2021	Principal Munsiff	PKLER040006042021_84_1	Salim P.M	Puthenpurackal House, Palachuvadu, Kakkanad Kochi			
3	Attachment in Execution(O.21 R.46]	OS/300067/2015	Principal Munsiff	PKLER040000812015_86_1	K.R Joseph	Kumbanayal House, K.K. Road, Kaloor, Kochi-17 KERALA			
4	Ordinary Notice	OS/301172/2004	Principal Munsiff	PKLER040000682004_85_1	V.R Jarome	Vadasserry House, Muppathadom p.o. Aluva 10 Ernakulam Dist. Ernakulam KERALA			
5	Attachment in Execution(O.21 R.46]	OS/300008/2019	First Additional Munsiff	PKLER040000252019_8_1	A.K.Abdullakuttv	Ambalathu Veetil, Edathuruthy Road, Edathuruthy Amsom, now residing at 36/2154, Shenov Cross			

In case of any de-allocation required under any circumstances, the process which is already been allocated, the Nazir will select the Bailiff name from the drop down list and select the Bailiff to whom it was allocated earlier and tag the case and click submit button, then it's completely de-allocated to the Bailiff to whom it was earlier allocated.

Bailiff Process Transfer:

In case of any de-allocation required under any circumstances, the process which is already been allocated, the Nazir will select the Bailiff name from the drop down list and select the Bailiff to whom it was allocated earlier and tag the case and click submit button, then it's completely de-allocated to the Bailiff to whom it was earlier allocated.

Bailiff Process Transfer:

The screenshot displays the NSTEP web application interface for Bailiff Process Transfer. The user is logged in as Sruthy Soman (Process Admin) in Kerala Ernakulam. The main content area shows a table of process entries with the following data:

Sr No	Process Title	Case No.	Designation Name	Process Id	Addressee Name	Addressee Address	Email	Mobile
1	Ordinary Notice View Process	OS/300367/2002	Second Additional Munsiff	PKLER040015572017_3_2	Corporation of Cochin	Corporation Office, Ernakulam KERALA		
2	Attachment in Execution [O.21 R.46] View Process	OS/300357/2021	Principal Munsiff	PKLER040006042021_84_1	Salim P.M	Puthenpuraackal House, Palachuvadu, Kakkanad Kochi		
3	Attachment in Execution [O.21 R.46] View Process	OS/300155/2019	First Additional Munsiff	PKLER040002292019_55_2	Manoj Kochummen Mathai	Ponnola House, Thattarambalam P.O., Mattom North, Mavelikkara, Alappuzha rep.by his POA Holder George.P, S/o.G.Pappy, aged 63 Years, Mother Theresia Road, Pandavath, Maradu.		
4	Attachment in Execution [O.21 R.46] View Process	OS/300067/2015	Principal Munsiff	PKLER040000812015_86_1	K.R Joseph	Kumbanayal House, K.K. Road, Kaloor, Kochi-17 KERALA		

By using this Option, Process Admin (Nazir) can transfer the Process allocated to one Bailiff to another Bailiff by selecting the Bailiff name and cases which are required to be transferred and click submit button.


Process Delivery:

The screenshot displays the NSTEP Process Delivery interface. The user is logged in as Sruthy Soman (Process Admin) in Kerala, Ernakulam. The interface shows a table of process entries with the following data:

Sr No	Process Id / Process Title	Case No.	Designation Name	Addressee Name	Addressee Address	Email	Mobile	Delivered Process
1	PKLRO40015572017_3_2 Ordinary Notice View Process	OS/300367/2002	Second Additional Munsiff	Corporation of Cochin	Corporation Office, Ernakulam KERALA			<input checked="" type="radio"/> Served <input type="radio"/> Unserved
2	PKLRO40006042021_84_1 Attachment in Execution[0.21 R.46] View Process	OS/300357/2021	Principal Munsiff	Salim P.M	Puthenpurackal House, Palachuvadu, Kakkanaad Kochi			<input checked="" type="radio"/> Served <input type="radio"/> Unserved
3	PKLRO40002292019_55_2 Attachment in Execution[0.21 R.46] View Process	OS/300155/2019	First Additional Munsiff	Manoj Kochummen Mathai	Ponnola House, Thattarambalam.P.O., Mattom North, Mavelikkara, Alappuzha rep.by his POA Holder George.P., S/o.G.Pappy, aged 63 Years, Mother Theresia Road, Pandavath, Maradu.			<input checked="" type="radio"/> Served <input type="radio"/> Unserved
	PKLRO40000812015_86_1							<input checked="" type="radio"/> Served <input type="radio"/> Unserved

This Option is used to update the stage of Service of Process by the concerned Process Servers/Bailiffs. If the Bailiff has served such particular summons/warrants etc., then he will click on Served button and will choose the Served Reason from the drop down list and in case of no Non- Service of any summons/warrants, he will click on the Option Un-served with the reason for non-service and click submit button.

Process Status:



National Service and Tracking
of Electronic Processes

Sruthy Soman Process Admin Kerala Ernakulam

[Home](#) / [Process Management](#) / [Process Status](#)

Process Status

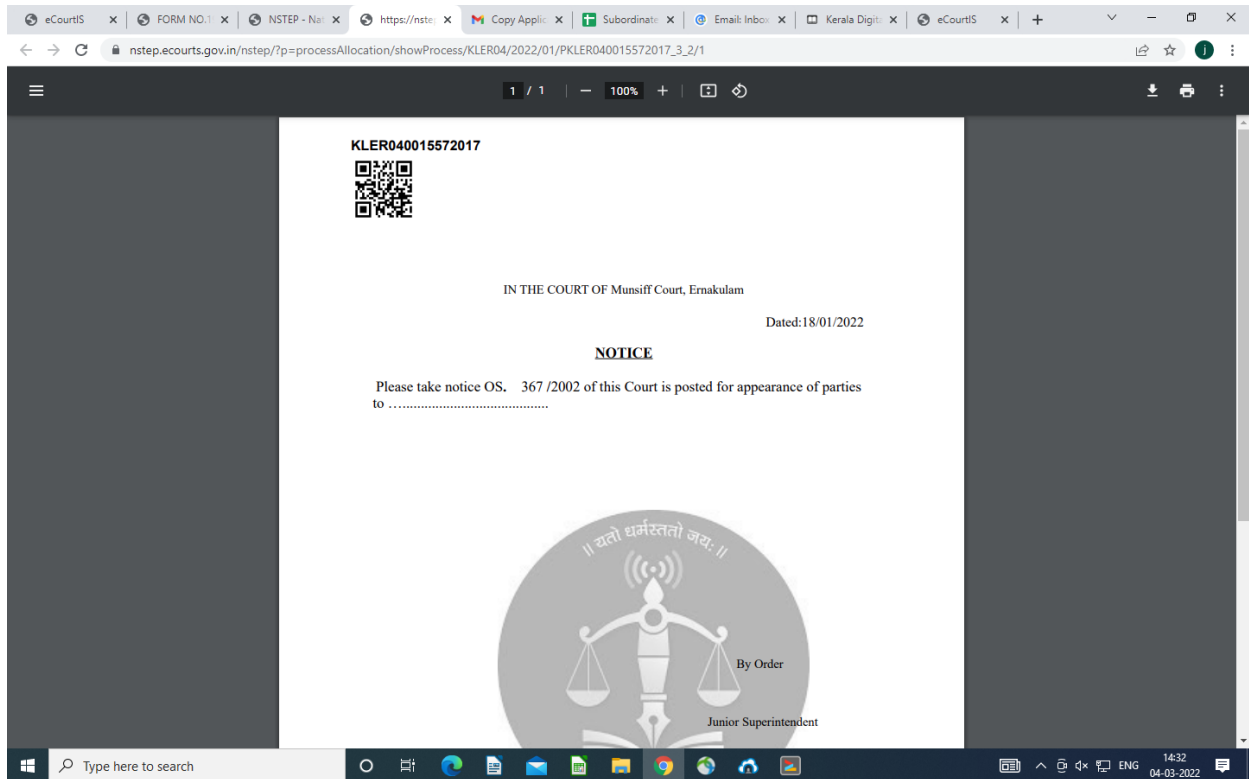
*Bailiff Name: Satheesh (KLER005)

Show 10 entries Search: PDF Excel CSV

Sr No	Court Establishment	Process Id / Process Title	Case No	Designation Name	Addressee Name	Delivery Date	Mobile	Signature	Photo	G
1	Munsiff Court Ernakulam	PKLER040024572018_67_1 Attachment in Execution[O.21 R.46]	EP/300476/2018	Principal Munsiff	The Shanmughapuram Co-opative Bank	09-07-2021		View Sign	View Photo	View Ma
2	Munsiff Court Ernakulam	PKLER040004312014_89_1 Attachment in Execution[O.21 R.46]	OS/300298/2014	First Additional Munsiff	Chinnamma	08-10-2021		View Sign	View Photo	View Ma
3	Munsiff Court Ernakulam	PKLER040004992011_65_2 Attachment in Execution[O.21 R.46]	OS/300339/2011	Principal Munsiff	Shivas	08-07-2021		View Sign	View Photo	View Ma
4	Munsiff Court Ernakulam	PKLER040000082019_17_1 Attachment before Judgement for fulfillment of decree[O.38 R.5]	OS/300005/2019	Third Additional Munsiff(RCC)	St.James Church	12-04-2021		View Sign	View Photo	View Ma
5	Munsiff Court Ernakulam	PKLER04000162010_15_1 Attachment in Execution[O.21 R.46]	OS/300009/2010	First Additional Munsiff	Vijaya Bank	04-02-2021		View Sign	View Photo	View Ma
6	Munsiff Court Ernakulam	PKLER040002932018_60_1 Attachment in Execution[O.21 R.46]	OS/300182/2018	Principal Munsiff	Nelson K	28-06-2021		View Sign	View Photo	View Ma

This Option will enable us to know the status of the Process, i.e., whether it is served or not served.

By using View option, we can view the process in PDF format which can be downloaded.



The screenshot shows the NSTEP web application interface. The browser address bar displays the URL `nstep.ecourts.gov.in/nstep/?p=main`. The page header includes the NSTEP logo and the text "National Service and Tracking of Electronic Processes". The user is identified as "Sruthy Soman" with the role "Process Admin" from "Kerala Ernakulam". A search bar is present in the top right corner.

The left sidebar contains the following navigation options:

- User Management
- Process Management
 - Consume Data
 - Process Allocation
 - Process Deallocation
 - Bailiff Process Transfer
 - Process Delivery
 - Process Status
 - Bailiff/Messenger Wise Process Report
 - Process Admin Report
 - Archive Process
 - Consume Previous Year Data

The main content area is titled "Consume Previous Year Data". It features a table with the following columns: "Select" and "Court Establishment".

Select	Court Establishment
<input checked="" type="checkbox"/>	Munsiff Court Ernakulam
<input type="checkbox"/>	Munsiff Court, Kolenchery
<input type="checkbox"/>	Judicial First class Magistrate Court, Kolenchery

Below the table is a blue "Pull" button.

The Windows taskbar at the bottom shows the search bar with the text "Type here to search", several application icons, and the system tray displaying the time "14:33" and date "04-03-2022".

We will be able to consume the previous year data.



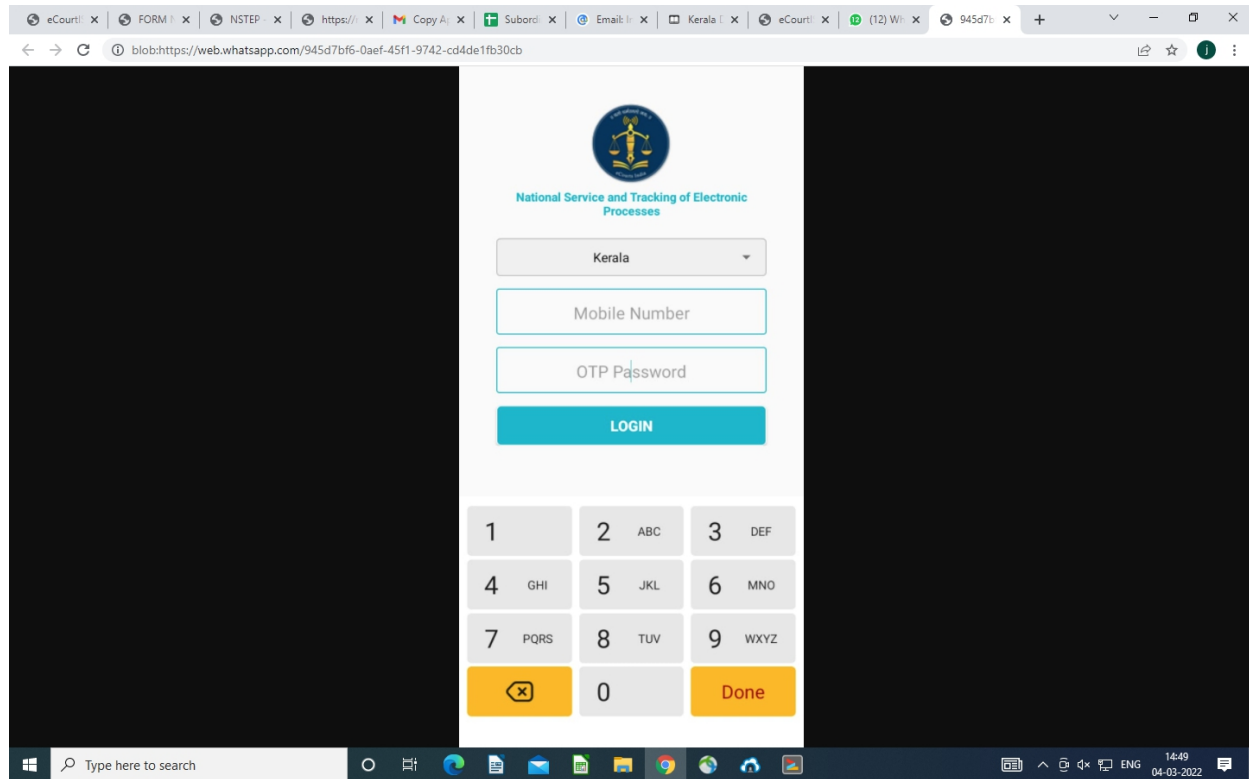
CHAPTER – III

SERVICE OF ELECTRONIC PROCESSES THROUGH NSTEP MOBILE APPLICATION

Service of Electronic Process through NSTEP Application:

The Bailiffs/Process Servers will be provided with a smart phone and the Procedure to operate the NSTEP Application with the smart phones is as follows:

1. Bailiff needs to select State from dropdown list and enter Registered Mobile number and OTP password already provided to them to login into the system.



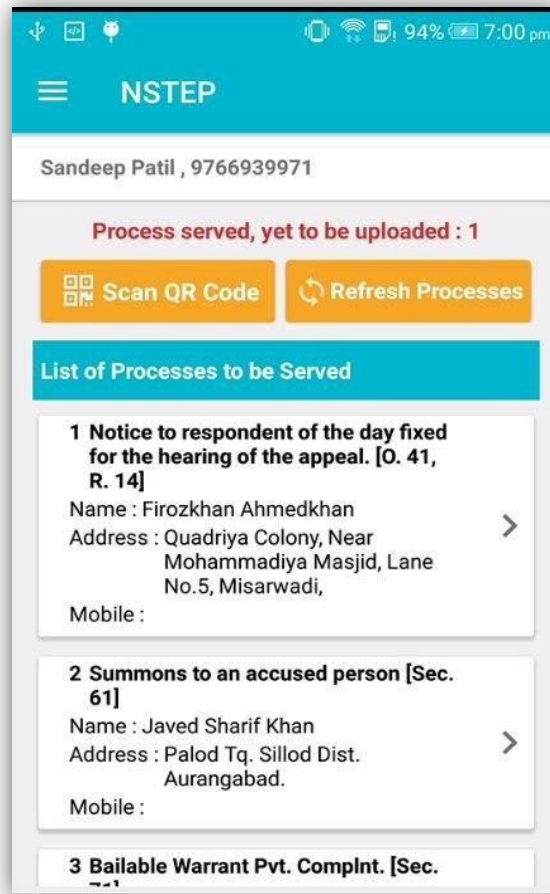
2. Once logged into the system, Main screen of the App will welcome the users.

The Main screen will show following elements

- a) On the Top, App will display count of processes for which status needs to be uploaded on the server.
- b) 'Scan QR Code' button is used to Scan QR Code of the case and displays list of processes belonging to that case.
- c) Once QR Code is scanned, button 'Show Previous' will be enabled. After clicking, it will show all processes allocated to the Bailiff.
- d) List of processes to be served is displayed.



e) 'Refresh Processes' button is used to receive newly allocated process to the Bailiff.




Process Service:

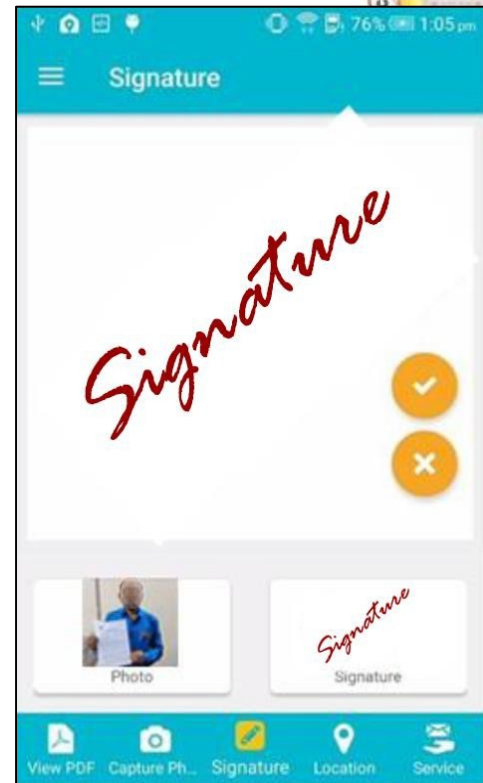
1. After the Bailiff reaches the address of the party to whom process is to be served, he needs to tap on the process from the list which will display the process in PDF format.
2. Hand over the physical copy of the process to the concerned party.

3. Click on 'Capture Photo' to capture photo of the person to whom process is served and

tap on 

4. Click on 'Signature' to capture the Signature of the person to whom process is served

and tap on 



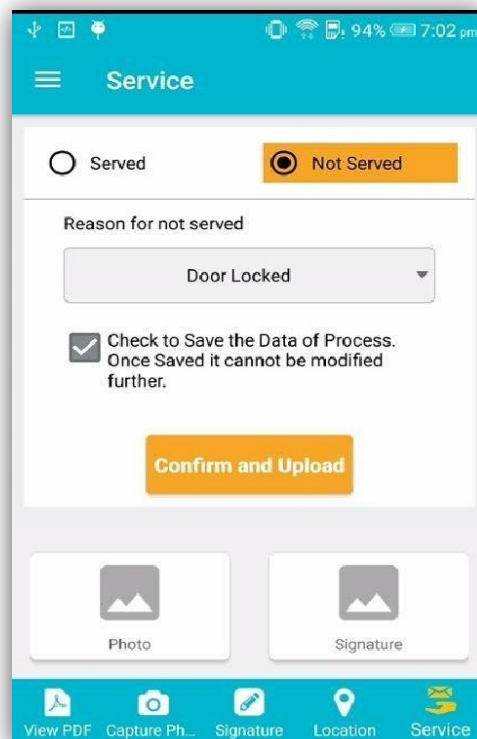
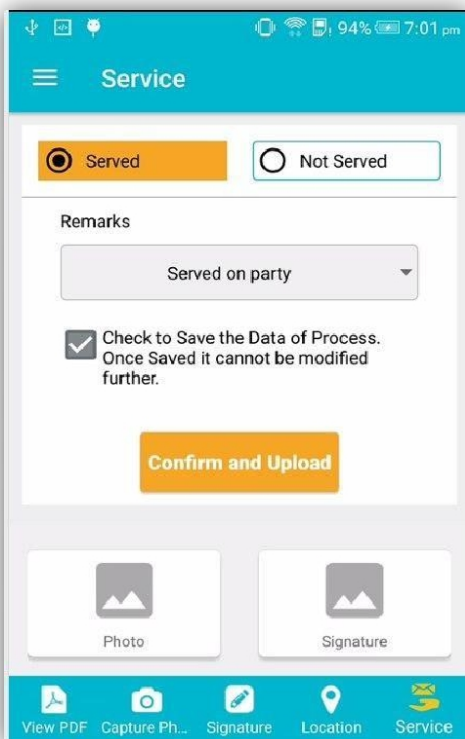
5. Once signature is captured, App displays the map for capturing mobile device location. Bailiff needs to tap on 'Save' button to store Latitude and Longitude of the location.



6. “Reload/Refresh” floating button is provided to refresh the map.



7. After capturing Location details, Bailiff needs to mark the status of process as “Served” or “Not Served” with respective remarks or reason for serving or non serving.





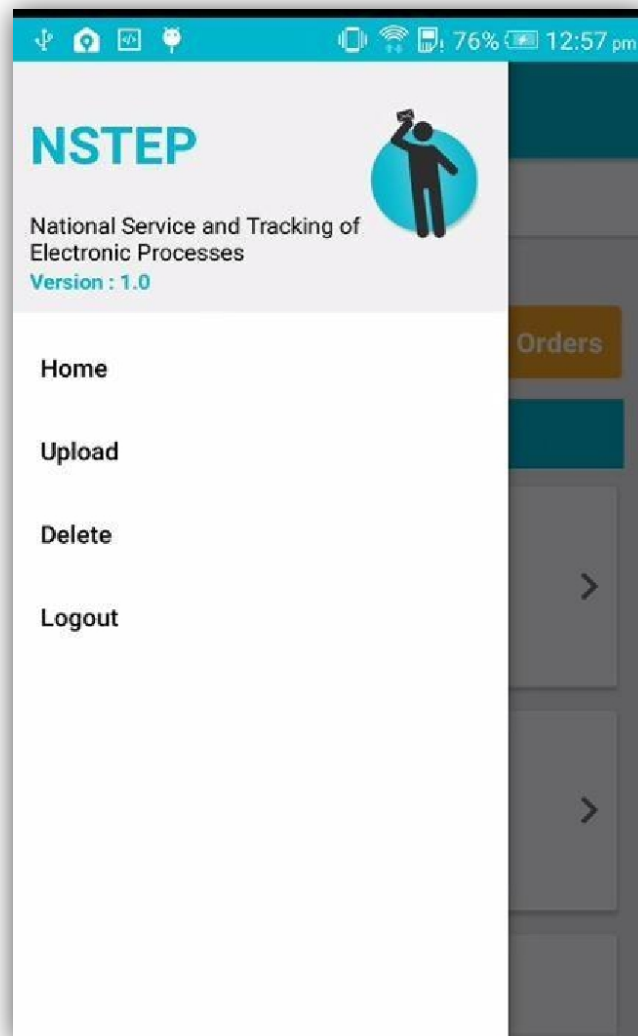
8. Bailiff needs to tick on 'Confirm and Upload' button to upload status of process to the server.

9. While uploading the status of processes to the server if any communication problem arises or device has network issues, then status gets uploaded locally on the mobile device of the Bailiff.

10. Bailiff can upload status of processes using 'UPLOAD' menu available in Side Menu.

Side Menu:

The Side Menu of App is used for various options like Upload, Delete and Logout.





Upload:

1. This option displays list of all served processes.
2. Bailiff can upload status of served processes to the server.
3. Re-uploading of process status can also be done from this option.

Upload

List of Processes Served

1 Notice to minor defendant. [O. 32, R. 3]
Name : Rushikesh Kailas Pakhare U/G Def No. 2
Address : Warud Kazi, Tq. Dist. Aurangabad.
Mobile :

2 Notice to respondent of the day fixed for the hearing of the appeal. [O. 41, R. 14]
Name : Firozkhan Ahmedkhan
Address : Quadriya Colony, Near Mohammadiya Masjid, Lane No.5, Misarwadi,
Mobile :

Upload

Delete:

1. This option displays list of processes whose status is already uploaded by Bailiff to the server.
2. Delete option is provided to the Bailiff to delete the processes from this list.

Delete

List of Processes to be Deleted

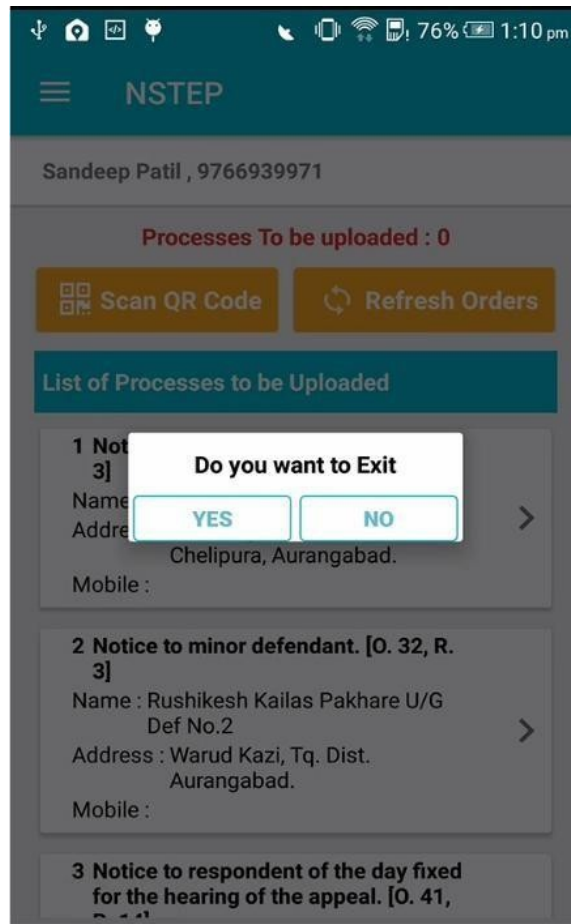
1 Notice to surety on breach of a bond [Sec. 446]
Name : Gorakh Shankar Gaikwad
Address : Ganori, Tq. - Fulambri, Dist. - Aurangabad
Mobile :

Delete



Logout:

This option is used to logout from the App.



Civil Process Generation & Integration with NSTEP Mobile App

1. At the Nazarat Section Process is filed. Process can be either Originated by Court or by the Petitioner/Respondent and a filing No is generated by the System.
2. If it is Originated by the Court then there is no process Fee
3. Process is Scrutinized by the Central Nazarat and Process fee is automatically calculated by the system.
4. If the Process is found defective, the same is returned to the concerned Party for curing the defect.
5. Once the defects are cured, the Process Number is Generated and sent to the Bench Section of the Respective Court.
6. Bench Section Notifies the Court Order/Notice/Summon and sends the same to the Nazarat Section for generating the Process.
7. Amin Generates the Process and the same is verified by the Central Nazarat and he Publishes the Process.
8. Once the Process is Published in the local CIS and if the delivery mode is through process server or through other court, the same is instantly available in the NSTEP web Portal if real time data of the Establishment is replicated in the NJDG server. If the process served by any other mode other than process server or through other courts it will not get reflected in NSTEP web portal.
9. Process admin allocates the Process to the Process Servers available for serving of the same using NSTEP webportal
10. The Process server carries two copies of the process generated by the system along with him and gets the signature of the person to whom he serves the Process and he returns back the acknowledged copy to the Nazarat. He can also view the electronic process allocated to him using the NSTEP mobile app and captures the Photo, Signature of the person and GPS location where the Process was Served and Uploads the Process Served Details in the Server.
11. The Process Delivery Status is Instantly available in the NSTEP Web Portal as well as Local CIS along with Photo, Signature and Location Details where it was served.
12. The Central Nazarat enters the Originals Returned Date in the System after he receives the acknowledgement from the Process Server.

13. In the Local CIS provision is given to serve the Process in other mode also other than using NSTEP mobile App and sms alert about the process whether served/Unerved is given to the party who has filed the process.

Server administration

- Best practices in Maintenance and monitoring of Servers.
- Server administration and server service related logs
- Remote server access using SSH

- Best practices in Maintenance and monitoring of Servers.
- Logs checking
- Monitoring tools
- Backups
- High availability
- Package upgrades
- Learn the normal behavior and plan future requirements

Logs checking

- */var/log*
- */var/log/apache2*
- */var/log/postgresql*
- */var/log/syslog*
- */var/log/php7.2-fpm.log*

Monitoring tools

- Command line tools

top, iotop, lsof, netstat

- Graphical tools

Nagios, Zabbix, Netdata

```

top - 11:39:30 up 99 days, 1:27, 1 user, load average: 0.02, 0.07, 0.08
Tasks: 407 total, 1 running, 277 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.4 us, 0.5 sy, 0.0 ni, 98.9 id, 0.2 wa, 0.0 hi, 0.0 si, 0.0 st
KiB Mem : 16423484 total, 12089180 free, 1775728 used, 2558576 buff/cache
KiB Swap: 4194300 total, 4144892 free, 49408 used. 14054912 avail Mem

```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
9434	root	20	0	42528	4020	3128	R	11.8	0.0	0:00.04	top -c
1	root	20	0	225724	8144	5612	S	0.0	0.0	9:20.00	/sbin/init maybe-ubi
2	root	20	0	0	0	0	S	0.0	0.0	0:02.18	[kthreadd]
4	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	[kworker/0:0H]
6	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	[mm_percpu_wq]
7	root	20	0	0	0	0	S	0.0	0.0	0:49.68	[ksoftirqd/0]
8	root	20	0	0	0	0	I	0.0	0.0	99:41.83	[rcu_sched]
9	root	20	0	0	0	0	I	0.0	0.0	0:00.00	[rcu_bh]
10	root	rt	0	0	0	0	S	0.0	0.0	0:01.09	[migration/0]
11	root	rt	0	0	0	0	S	0.0	0.0	0:20.71	[watchdog/0]
12	root	20	0	0	0	0	S	0.0	0.0	0:00.00	[cpuhp/0]
13	root	20	0	0	0	0	S	0.0	0.0	0:00.00	[cpuhp/1]
14	root	rt	0	0	0	0	S	0.0	0.0	0:20.61	[watchdog/1]
15	root	rt	0	0	0	0	S	0.0	0.0	0:01.14	[migration/1]
16	root	20	0	0	0	0	S	0.0	0.0	0:47.49	[ksoftirqd/1]
18	root	0	-20	0	0	0	I	0.0	0.0	0:00.00	[kworker/1:0H]
19	root	20	0	0	0	0	S	0.0	0.0	0:00.00	[cpuhp/2]
20	root	rt	0	0	0	0	S	0.0	0.0	0:20.60	[watchdog/2]
21	root	rt	0	0	0	0	S	0.0	0.0	0:01.30	[migration/2]
22	root	20	0	0	0	0	S	0.0	0.0	0:43.71	[ksoftirqd/2]

Total DISK READ : 0.00 B/s | Total DISK WRITE : 3.87 K/s
Actual DISK READ: 0.00 B/s | Actual DISK WRITE: 0.00 B/s

TID	PRIO	USER	DISK READ	DISK WRITE	SWAPIN	IO>	COMMAND
29493	be/4	postgres	0.00 B/s	3.87 K/s	0.00 %	0.00 %	postgres: 10/main: postgr~92.168.55.122(53457) ic
1	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	init maybe-ubiquity
2	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[kthreadd]
4	be/0	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[kworker/0:0H]
6	be/0	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[mm_percpu_wq]
7	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[ksoftirqd/0]
8	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[rcu_sched]
9	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[rcu_bh]
10	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[migration/0]
11	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[watchdog/0]
12	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[cpuhp/0]
13	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[cpuhp/1]
14	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[watchdog/1]
15	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[migration/1]
16	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[ksoftirqd/1]
18	be/0	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[kworker/1:0H]
19	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[cpuhp/2]
20	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[watchdog/2]
21	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[migration/2]
22	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[ksoftirqd/2]
24	be/0	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[kworker/2:0H]
25	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[cpuhp/3]
26	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[watchdog/3]
27	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[migration/3]
28	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[ksoftirqd/3]
30	be/0	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[kworker/3:0H]
31	be/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[cpuhp/4]
32	rt/4	root	0.00 B/s	0.00 B/s	0.00 %	0.00 %	[watchdog/4]

```
root@agenda-setup:~# lsof -i :5432
```

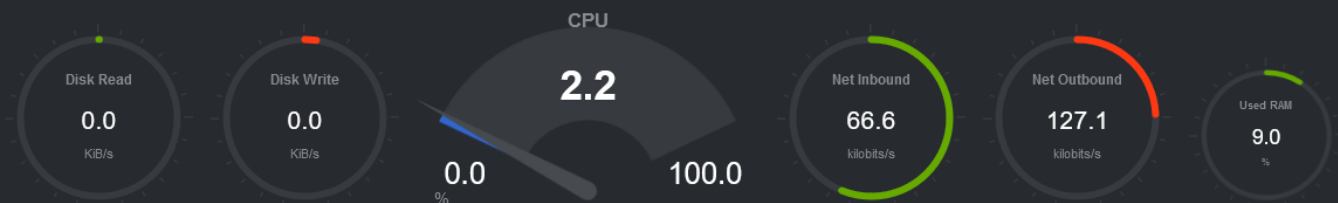
COMMAND	PID	USER	FD	TYPE	DEVICE	SIZE/OFF	NODE	NAME
postgres BLISHED)	7428	postgres	9u	IPv4	185730154	0t0	TCP	agenda-setup:postgresql->192.168.155.43:61583 (ES
postgres BLISHED)	7432	postgres	9u	IPv4	185730156	0t0	TCP	agenda-setup:postgresql->192.168.155.43:51942 (ES
postgres BLISHED)	8800	postgres	9u	IPv4	187535380	0t0	TCP	agenda-setup:postgresql->192.168.155.43:52890 (ES
postgres LISHED)	14369	postgres	9u	IPv4	189955773	0t0	TCP	agenda-setup:postgresql->192.168.55.24:44896 (EST
postgres LISHED)	14372	postgres	9u	IPv4	189955774	0t0	TCP	agenda-setup:postgresql->192.168.55.24:44898 (EST
postgres	14413	postgres	3u	IPv4	180593281	0t0	TCP	*:postgresql (LISTEN)
postgres	14413	postgres	4u	IPv6	180593282	0t0	TCP	*:postgresql (LISTEN)
postgres LISHED)	15010	postgres	9u	IPv4	189955934	0t0	TCP	agenda-setup:postgresql->192.168.55.24:58482 (EST
postgres LISHED)	15013	postgres	9u	IPv4	189955935	0t0	TCP	agenda-setup:postgresql->192.168.55.24:58484 (EST
postgres LISHED)	15028	postgres	9u	IPv4	189955940	0t0	TCP	agenda-setup:postgresql->192.168.55.24:48634 (EST
postgres LISHED)	15040	postgres	9u	IPv4	189956034	0t0	TCP	agenda-setup:postgresql->192.168.55.24:48638 (EST
postgres LISHED)	16115	postgres	9u	IPv4	180593465	0t0	TCP	agenda-setup:postgresql->192.168.55.24:34506 (EST
postgres LISHED)	17898	postgres	9u	IPv4	189968384	0t0	TCP	agenda-setup:postgresql->192.168.55.24:42248 (EST
postgres LISHED)	17901	postgres	9u	IPv4	189983745	0t0	TCP	agenda-setup:postgresql->192.168.55.24:42250 (EST
postgres BLISHED)	18940	postgres	9u	IPv4	188360441	0t0	TCP	agenda-setup:postgresql->192.168.155.43:59302 (ES
postgres	22002	postgres	9u	IPv4	190011661	0t0	TCP	agenda-setup:postgresql->192.168.55.24:38378 (EST

Discover the free benefits of Netdata Cloud:

- Home
- Node View
- Overview
- Nodes
- Dashboards
- Alerts
- Anomalies
- Pricing
- Privacy

System Overview

Overview of the key system metrics.



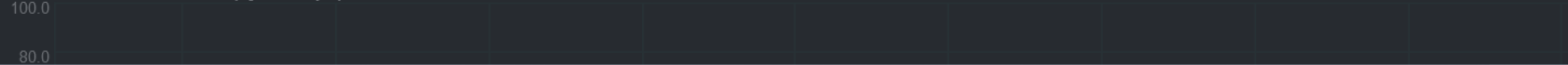
cpu

Total CPU utilization (all cores). 100% here means there is no CPU idle time at all. You can get per core usage at the [CPUs](#) section and per application usage at the [Applications Monitoring](#) section.

Keep an eye on **iowait** (0.22%). If it is constantly high, your disks are a bottleneck and they slow your system down.

An important metric worth monitoring, is **softirq** (0.00%). A constantly high percentage of softirq may indicate network driver issues. The individual metrics can be found in the [kernel documentation](#).

Total CPU utilization (system.cpu)



System Overview

- cpu
- load
- disk
- ram
- network
- processes
- idlejitter
- interrupts
- softirqs
- softnet
- entropy
- uptime
- clock synchronization
- ipc semaphores
- ipc shared memory

⚡ CPUs

💾 Memory

🗄️ Disks

📁 Filesystem

netdata alarms

Active All Log

Raised Alarms

disk - /

disk_space._

disk space usage 90.9%

disk / space utilization

role: sysadmin



warning when `$this > (($status >= $WARNING) ? (80) : (90))`

critical when `$this > (($status == $CRITICAL) ? (90) : (98))`

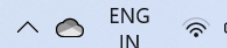
calculation `$used * 100 / ($avail + $used)`

check every 1 min

execute `/usr/libexec/netdata/plugins.d/alarm-notify.sh`
hysteresis on escalation 1 min, on recovery 15 mins,
multiplied by 1.5, up to 1 hour

source 12@/usr/lib/netdata/conf.d/health.d/disks.conf

81°F
Cloudy



Backups

Incremental and differential

- Rsync – most powerful backup tool
- Scp
- Tar, zip

High availability

- Needed when there is a hardware failure
- Real time sync using cron or incron tools
- Database Replication

Package upgrades

- To keep all packages in their latest versions
- apt update, apt upgrade
- Compatible issues after upgrades

Learn the normal behavior and plan future requirements

- Regular monitoring
- Take action plan when notice a slight changes

Web server configuration

- Apache, Nginx, Tomcat

Apache install

```
apt install apache2
```

Verifying Apache service

root@agenda-setup: ~

```
root@agenda-setup:~# systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2022-07-29 13:21:19 IST; 4 weeks 0 days ago
     Docs: https://httpd.apache.org/docs/2.4/
  Process: 18320 ExecReload=/usr/sbin/apachectl graceful (code=exited, status=0/SUCCESS)
 Main PID: 1548 (apache2)
    Tasks: 56 (limit: 4915)
   CGroup: /system.slice/apache2.service
          └─ 1548 /usr/sbin/apache2 -k start
          └─ 18367 /usr/sbin/apache2 -k start
          └─ 18370 /usr/sbin/apache2 -k start
          └─ 18375 /usr/sbin/apache2 -k start
```

```
Aug 25 06:25:34 agenda-setup apachectl[2103]: AH00558: apache2: Could not reliably determine the server's full
```

```
Aug 25 06:25:34 agenda-setup systemd[1]: Reloaded The Apache HTTP Server.
```

```
Aug 26 06:25:15 agenda-setup systemd[1]: Reloading The Apache HTTP Server.
```

```
Aug 26 06:25:19 agenda-setup apachectl[2130]: AH00112: Warning: DocumentRoot [/var/www/html/minitz] does not
```

```
Aug 26 06:25:19 agenda-setup apachectl[2130]: AH00558: apache2: Could not reliably determine the server's full
```

```
Aug 26 06:25:19 agenda-setup systemd[1]: Reloaded The Apache HTTP Server.
```

```
Aug 27 06:25:13 agenda-setup systemd[1]: Reloading The Apache HTTP Server.
```

```
Aug 27 06:25:24 agenda-setup apachectl[18320]: AH00112: Warning: DocumentRoot [/var/www/html/minitz] does not
```

```
Aug 27 06:25:24 agenda-setup apachectl[18320]: AH00558: apache2: Could not reliably determine the server's full
```

```
Aug 27 06:25:24 agenda-setup systemd[1]: Reloaded The Apache HTTP Server.
```

```
root@agenda-setup:~# ll /var/www/html/minitz
```

```
ls: cannot access '/var/www/html/minitz': No such file or directory
```

```
root@agenda-setup:~#
```

Setting Up Virtual Hosts in Apache

```
nano
```

```
/etc/apache2/sites-
```

```
available/yourdomain.
```

```
com.conf
```

HTTPS

a2enmod ssl

SSL Engine

on

/etc/apache2/sites-available/ssl.yourdomain.com.conf

- <virtualhost *:443>
- ServerName yourdomain.com
- ServerAlias www.yourdomain.com
- DocumentRoot /var/www/yourdomain.com
- ErrorLog \${APACHE_LOG_DIR}/error.log
- CustomLog \${APACHE_LOG_DIR}/access.log combined
- </virtualhost>

- <Directory "/var/www/yourdomain.com">
- Options Indexes FollowSymLinks
- AllowOverride All
- Order allow,deny
- allow from all
- Require all granted

Activate virtual host configuration file

- `a2ensite yourdomain.com.conf`

Test errors in Apache conf

`apache2ctl configtest`

or

- `apache2ctl -t`

- Restart apache service - `/etc/init.d/apache2 restart`

Backup Policy of Application and Database Servers.

- Tools for taking backup

rsync, scp

```
rsync -avz /home/user/ root@remoteIP:/home/user/
```

- Backup Retention

Daily, Weekly, Monthly

- Various backup destinations / locations

Database Administration

Basic configuration of POSTGRESQL

/etc/postgresql/10/main/postgresql.conf

/etc/postgresql/10/main/pg_hba.conf

/etc/postgresql/10/main/postgresql.conf

data_directory = '/var/lib/postgresql/10/main'

hba_file = '/etc/postgresql/10/main/pg_hba.conf'

listen_addresses = '*'

port = 5432

max_connections = 100

shared_buffers = 128MB

etc/postgresql/10/main/pg_hba.conf

• /
-f
PuTTY (inactive)

```
# configuration parameter, or via the -i or -h command line switches.
```

```
# DO NOT DISABLE!
```

```
# If you change this first entry you will need to make sure that the  
# database superuser can access the database using some other method.  
# Noninteractive access to all databases is required during automatic  
# maintenance (custom daily cronjobs, replication, and similar tasks).  
#
```

```
# Database administrative login by Unix domain socket
```

```
local all postgres md5
```

```
# TYPE DATABASE USER ADDRESS METHOD
```

```
# "local" is for Unix domain socket connections only
```

```
local all all peer
```

```
# IPv4 local connections:
```

```
host all all 0.0.0.0/0 md5
```

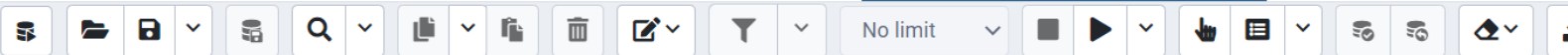
```
host all all 192.168.1.19/32 md5
```

```
# IPv6 local connections:
```

```
host all all ::/0 md5
```

```
# Allow replication connections from localhost, by a user with the
```

```
# replication privilege.
```



Query Editor Query History

```
1 select * from user_roles;
```

Notifications

Recorded time	Event	Process ID	Payload
---------------	-------	------------	---------

No data found

Data Output Explain Messages

	urole_id integer	urole_code character varying (10)	urole_name character varying (50)	urole_desc character varying (100)	urole_type character (20)	valid_y_n character (1)	updt_date time with time zone
1	1	Adv	Advocate	Bar Council Regd Advocates	A	Y	[null]
2	2	LF	Law Firm	Regd Law Firms	A	Y	[null]
3	3	SC	S Council	Standing Council	A	Y	[null]
4	5	PP	PP	Public Prosicutor	A	Y	[null]
5	6	PinP	PinP	Party in Person	A	Y	[null]
6	4	GP	GP	Government Pleader	A	Y	[null]

- > urgent_memo
- > urgent_memo_files
- > user_logs
- > user_menu_map_t
- > user_menu_master_t
- > user_role_master_t
- > user_role_master_t_ne
- > user_role_t
- > user_role_types
- > user_rolecis_t
- > user_roleperipherycis_
- > user_roles
- > user_type_t
- > vakalath_e_filing
- > vakalath_master
- > vakalath_parties
- > vakalath_relinquish
- > vakalath_uploads
- > vc_request
- > video_conference
- > vk_extra_adv_t
- > vkobjection_history
- > work_sheet
- > Trigger Functions

Part 1

- Database Administration
- Monitoring & Data Replication

Basic commands

DUMP :

- `pg_dump -U postgres dbname > dbname.sql`
- RESTORE :
- `psql -h 127.0.0.1 -U postgres remotedbname < dbname.sql`
- or
- `sudo -u postgres psql db_name < db_name.sql`

- Take full database dump
- `pg_dump -Fc -Upostgres db_name > backupfilename.dump`
- Restore from the db dump
- `pg_restore -U postgres -d db2_name backupfilename.dump`

- Command to restore contents of one table only :
- `pg_restore -U postgres --data-only -d db_name -t table_name backupfilename.dump`

Command to restore one table on an already existing database :

1. Drop the concerned table if it exists on destination db.

2. At source :

```
root@ecourts:/home# pg_dump -Upostgres -d
```

- Connecting remote database from source server :
- Ensure remote server is accessible over port 5432
- `psql -h REMOTEIP -p 5432 -U username -W -d REMOTEDB`
-

```
root@highcourtkerala:~# psql -h 192.168.1.12 -p 5432 -U postgres -W -d highcourtofkerala
Password for user postgres:
psql: connection to server at "192.168.1.12", port 5432 failed: FATAL: password authentication failed for user
"postgres"
connection to server at "192.168.1.12", port 5432 failed: FATAL: password authentication failed for user "post
gres"
root@highcourtkerala:~#
root@highcourtkerala:~#
root@highcourtkerala:~# psql -h 192.168.1.12 -p 5432 -U postgres -W -d highcourtofkerala
Password for user postgres:
psql (10.21 (Ubuntu 10.21-0ubuntu0.18.04.1))
SSL connection (protocol: TLSv1.3, cipher: TLS_AES_256_GCM_SHA384, bits: 256, compression: off)
Type "help" for help.
```

```
highcourtofkerala=# \l
```

List of databases

Name	Owner	Encoding	Collate	Ctype	Access privileges
-----+-----+-----+-----+-----+-----					

Part 2

- Database Administration
- Monitoring & Data Replication

Database Replication

- Availability
- Network/Server performance by choosing multiple locations
- Streaming replication

Replication Process

Master server parameters :

postgresql.conf

- `listen_addresses = '*'`
- `port = 5432`
- `max_connections`
- `wal_level = replica`
- `archive_mode = off/on`

pg_hba.conf

- Replication user
- Optional – Archive mode

- Slave server parameters
-
- `listen_addresses = '*'`
- `port = 5432`
- `max_connections = 100`
- `max_wal_senders = 3`
- `wal_keep_segments = 10`

- `pg_basebackup -h master_ip -p 5432 -U replica_username -D /var/lib/postgresql/10/main -Fp -Xs -P`
- Test replication
create/remove test databases
`select * from pg_stat_replication;`

pid	usesysid	username	application_name	client_addr	client_hostname	client_port	backend_start	backend_xmin	state	sent_lsn	write_lsn	flush_lsn	replay_lsn	write_lag	flush_lag	rep	
18281	438184	[REDACTED]	walreceiver	[REDACTED]			2022-08-26 21:35:44.744569+05:		streaming	25/E9FB8228	25/E9FB8228	25/E9FB8228	25/E9FB8228	00:00:00.032814	00:00:00.032881	00:00:00.032887	0 async
20053	438184	[REDACTED]	walreceiver	[REDACTED]			2022-08-27 21:37:08.046291+05:		streaming	25/E9FB8228	25/E9FB8228	25/E9FB8228	25/E9FB8228				0 async
26240	438184	[REDACTED]	walreceiver	[REDACTED]			2022-08-09 00:52:09.386934+05:		streaming	25/E9FB8228	25/E9FB8228	25/E9FB8228	25/E9FB8228	00:00:00.000581	00:00:00.001762	00:00:00.001979	0 async
6515	609605	[REDACTED]	walreceiver	[REDACTED]			2022-08-29 10:17:31.025593+05:		streaming	25/E9FB8228	25/E9FB8228	25/E9FB8228	25/E9FB8228	00:00:00.039225	00:00:00.039672	00:00:00.039866	0 async

(4 rows)

Find a space to join

Judgment/Orders uploading to NDC servers

- Rsync

```
rsync -avz /orders/ user@remoteip:/orders/
```

From local, another script using rsync

Working and management of VMWare

With VMware virtualization solutions you can reduce IT costs while increasing the efficiency, utilization and flexibility of their existing computer hardware.

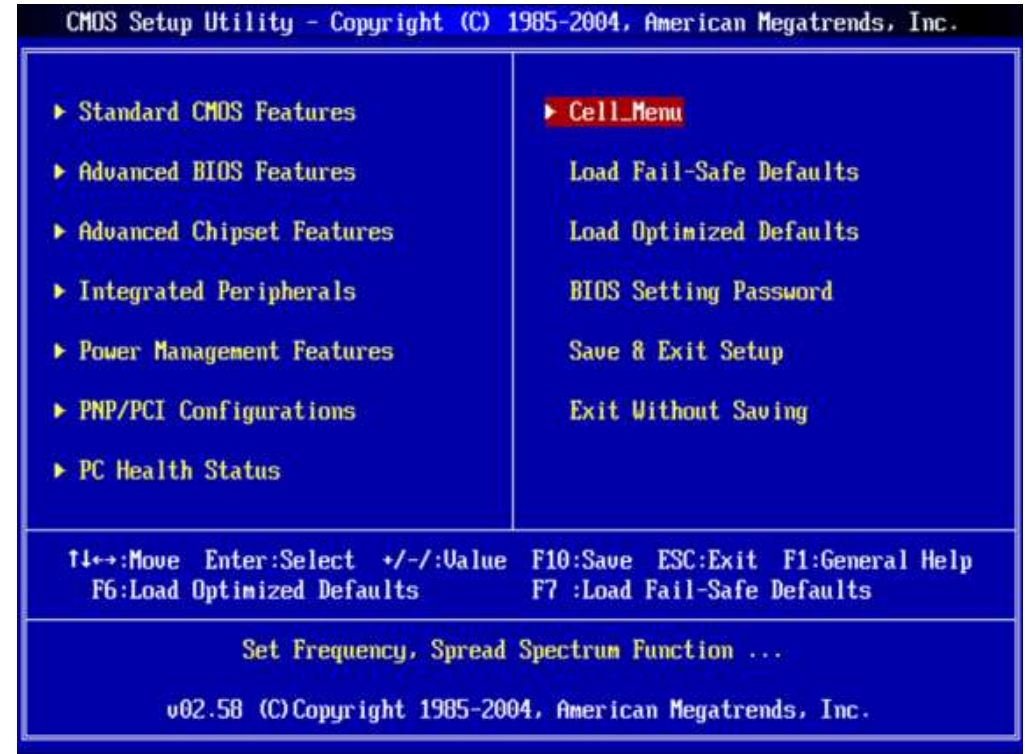
Reduce energy costs by 80%, Power down servers without affecting applications or users.



Handling BIOS of Rack Server / Pedestal Server

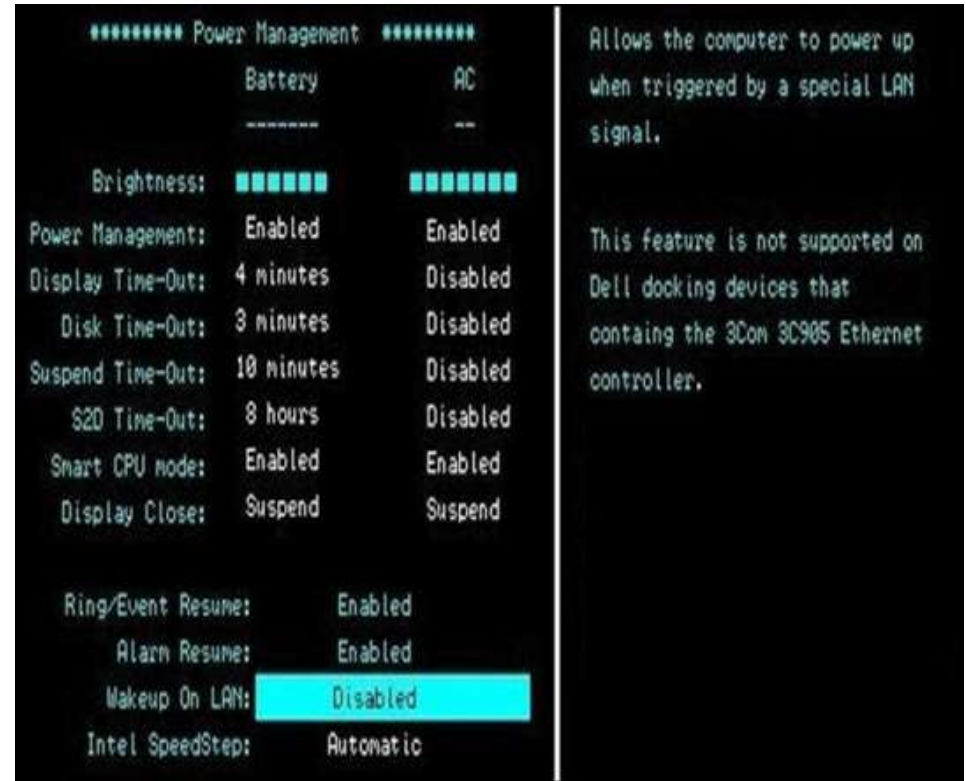
How to configure BIOS:

- Turn on or restart your Server.
- Press "Esc," "Del," "F1," "F2," "Ctrl-Esc" or "Ctrl-Alt-Esc" as soon as BIOS type or version appears on screen to enter BIOS Setting.



Configuring Wakeup LAN

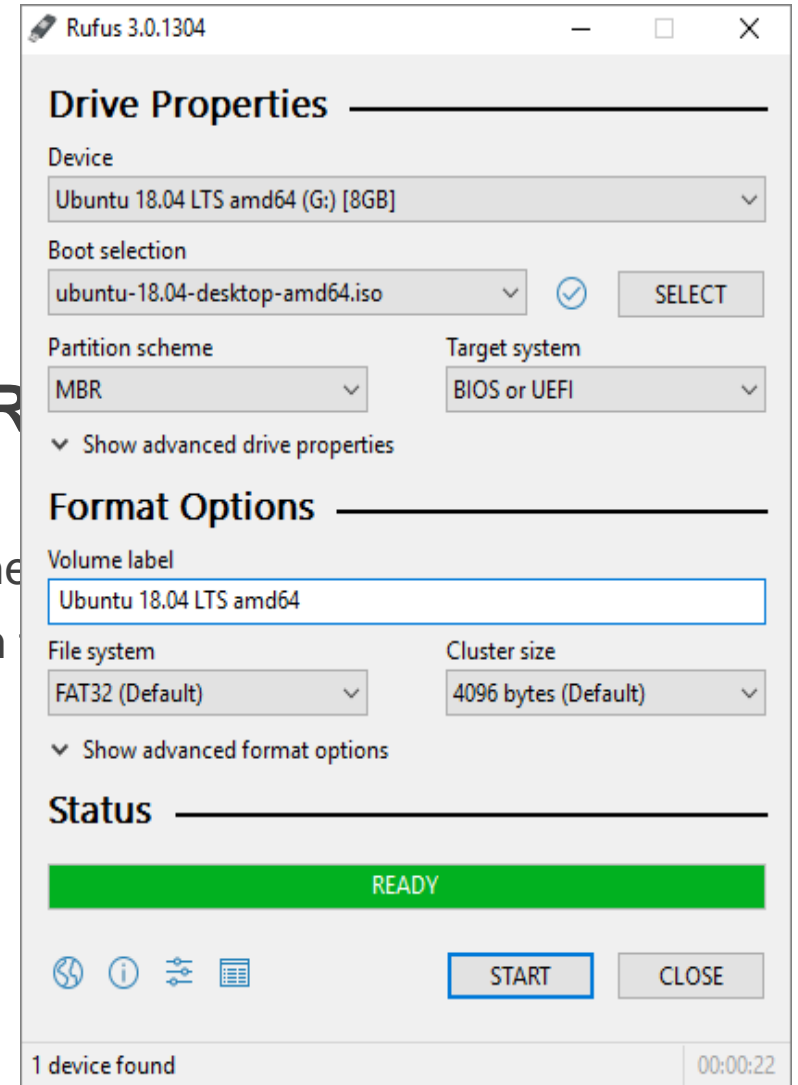
Wake-on-LAN is an industry-standard protocol for waking computers up from a very low power mode remotely.



To make a bootable pendrive in UEFI(Unified Extensible Firmware Interface) mode

Create UEFI Bootable USB Drive with Rufus

- **Device:** Select your USB flash drive.
- **Boot selection:** Select DISK or ISO image. And click the SELECT button to choose the Ubuntu 18.04 ISO file from its folder location.
- **Partition scheme:** Select GPT for UEFI.
- **Target system:** Select UEFI (non CSM).
- **File system:** Select NTFS.



.Installation of UBUNTU 16.04 Server OS and post configuration of OS in the Rack / Pedestal Server.

- Important steps to install ubuntu Server 16.04
- *Disk Partition*
- *LVM*
- ***No**automatic updates for*
- *software to install. Select only standard system utilities and **OpenSSH** server*
- Update and Upgrade Ubuntu System
- *Create New Account in Ubuntu*
- *sudo adduser ubuntu_user*
- *sudo apt install package_name*
- *Configure System Hostname in Ubuntu*
- *hostnamectl set-hostname highcourt*

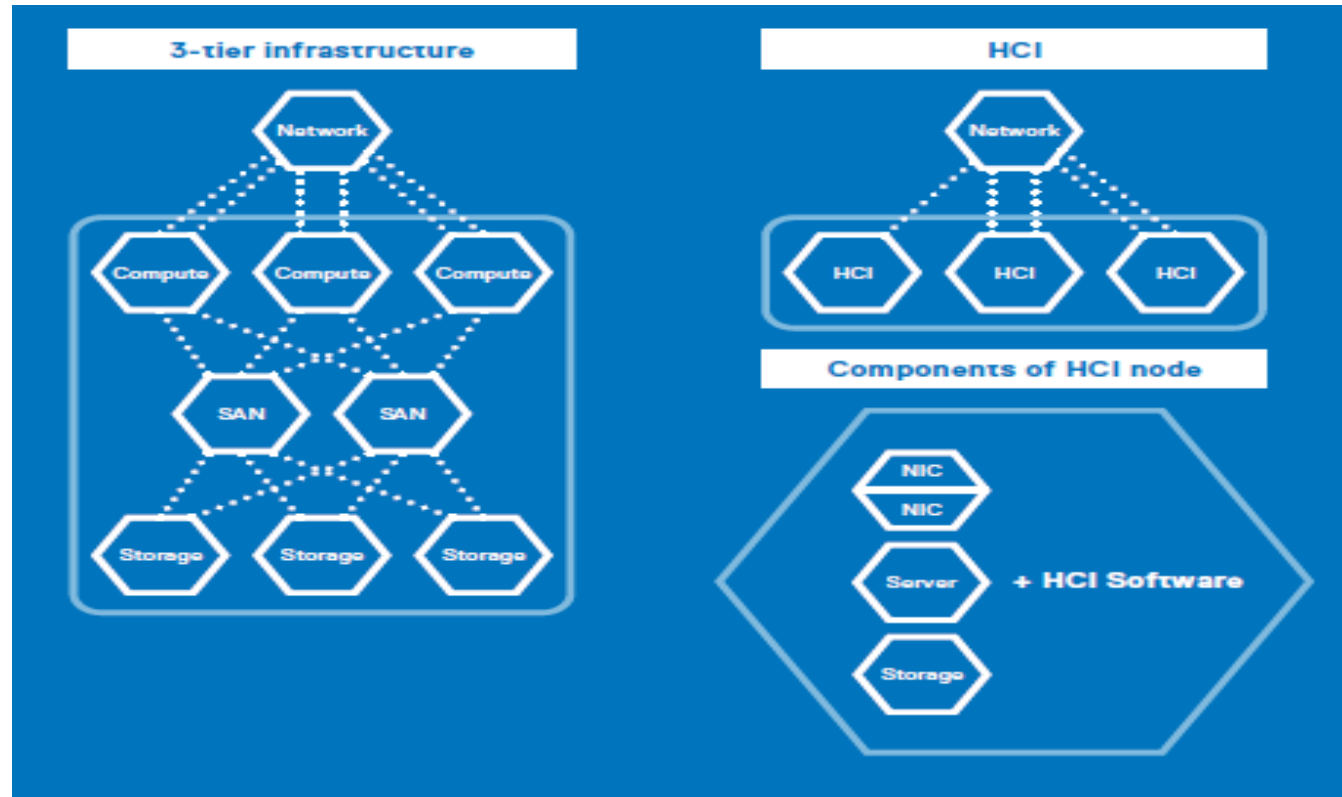
FTP server configuration

FTP is a network protocol used to **exchange** and **manipulate** files over a TCP/IP-based network. FTP is built on a client-server. FTP is used either with user-based password authentication or with anonymous user access.

- In **active mode** the FTP Client sends the server the IP address and port number that the client will use for the data connection, and the **server opens** the connection.
- In **passive mode** the server sends the client an IP address and port number and the **client opens** the connection to the server. This mode is used, when the client is located behind a firewall and unable to accept incoming TCP connection

VSFTPD, very secure FTP daemon, is an FTP server for many Unix-like systems, including Linux. vsftpd is beneficial for optimizing security, performance, and stability. It also provides strong protection against security problems found in other FTP servers, encryption support with SSL integration, and more.

HCI(Hyperconverged Infrastructure)



WHAT IS HCI

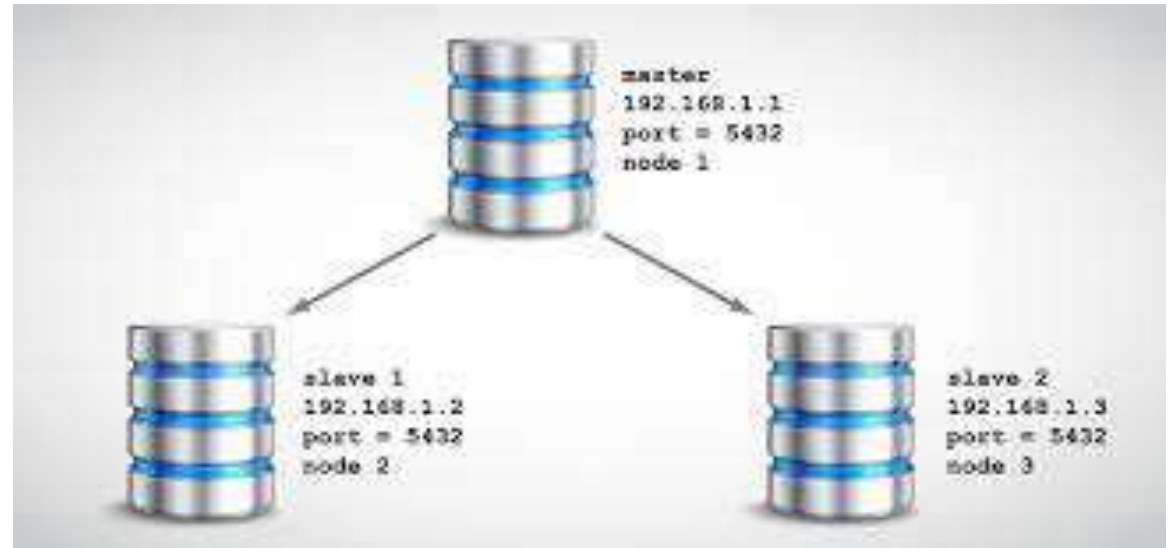
- HCI integrates compute, storage and networking into a single appliance coupled with data management and consolidation capabilities that can scale-out according to application needs, thereby eliminating the need for a traditional SAN or NAS.
- Dell EMC VxRail is powered by PowerEdge server platforms and is the only jointly engineered HCI solution with VMware, optimized for VMware vSAN, and designed to enable deep integration across the VMware ecosystem. This leaves you with a powerful curated solution that enables you to:
- HCI offers ultimate simplicity, flexibility and agility, essentially collapsing the traditional three-tier server, network, and storage model so that the infrastructure itself is much easier to manage.

About High Court HCI

- In High Court we have used Four Nodes (Four servers) Each one has 8TB SSD storage, 430 GB ram and 24 core CPU, each node is configured using VMware Exsi. The Vcentre server is used to creating the vSAN cluster, under this cluster all Four nodes are added also created a storage pool using all these nodes storage ($8\text{TB} \times 4 = 32\text{TB}$), all these nodes are manage using vSphere client.

SLONE configuration for Data Replication.

Slony is an asynchronous master-slave replication system for the PostgreSQL DBMS.



A close-up photograph of a person's hands typing on a laptop keyboard. The laptop screen is visible in the background, displaying a code editor with XML-like code. The code includes elements like <reference>, <update handle>, <action method>, <wrap>, <block type>, and <label>. The text is overlaid on a semi-transparent pink rounded rectangle.

Basic Programming Concepts and Basics of PHP Programming

Programming Concepts

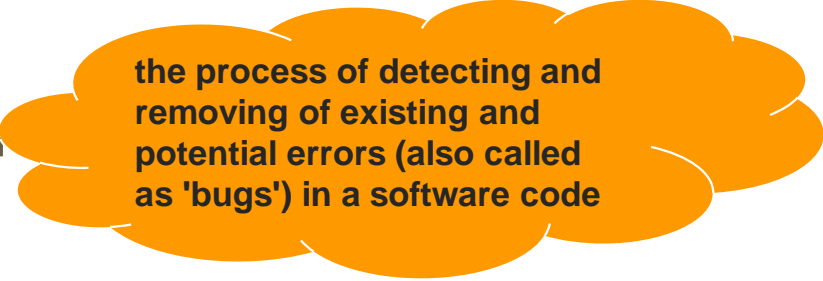
- Programming concepts
- Introduction to programming languages
- PHP Basics
- HTML, PHP sample code
- Web application security basics
- 'eforms.nic.in' website basics

Basic Programming Concepts

- **Definition:** The process of developing the computer programs is known as C P.
- **Computer program:**
It is set of instructions which enable particular processes to be performed by the computer. The program used by computer is known as computer software.
- **Computer Programming Language:**
Definition: It is set of symbols, conventions, rules used by the user to communicate with the computer. Computer can only accept the instruction for performing any tasks in a computer programming language.

Factors of Good Programming Languages

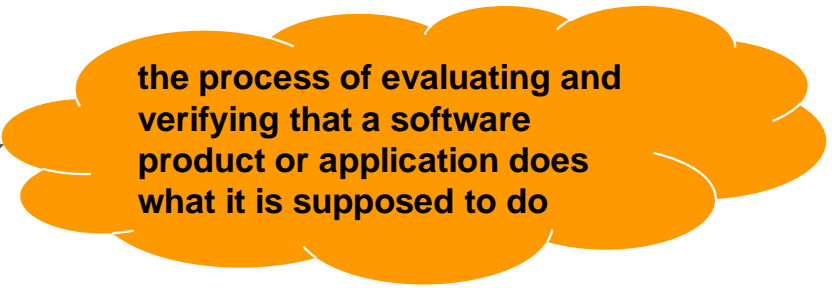
- Suitability for solving the problem
- Easy coding
- Easy debugging
- Existing hardware and software
- Programmer productivity
- Nature of Problem to be solved



the process of detecting and removing of existing and potential errors (also called as 'bugs') in a software code

Steps in Computer Programming

- Requirement identification
- Program Design
- Program Coding
- Program Debugging
- Program testing
- Program Documentation
- Program Maintenance



the process of evaluating and verifying that a software product or application does what it is supposed to do

Good Programming Practices:

The following are the principles of good programming practices

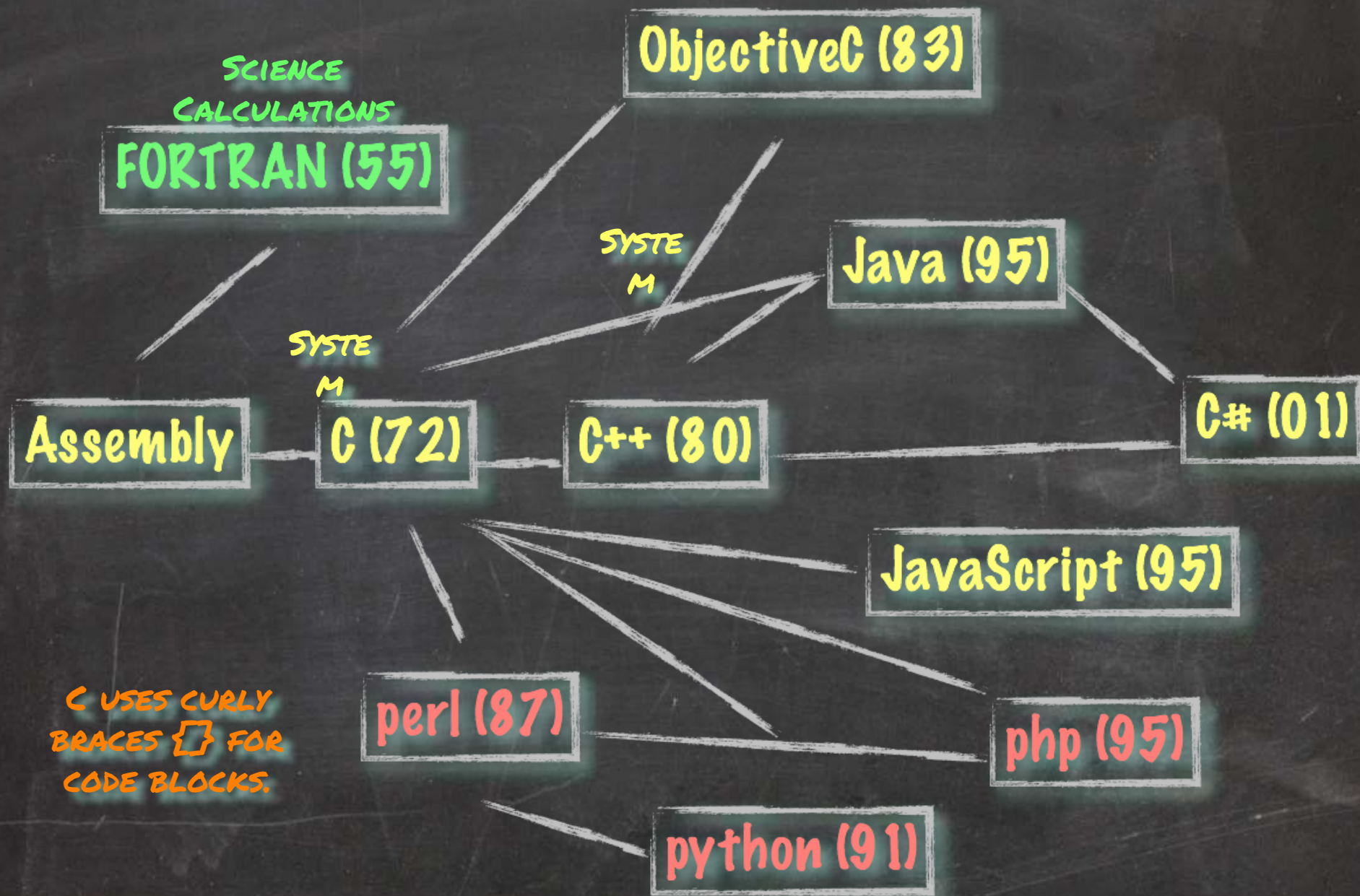
- The program requirement must be clear and well documented
- Programmer should keep the working paper
 - Error in program for correction
 - Changes required by user
- Working paper must include requirements and DFD
- Programmer should keep the program short
- Before program implementation the program should be tested.
- Provisions for program amendments
- Each version of program should be separately identified.

Pseudo code:

- It is an imitation of actual computer instructions and are phrases written in ordinary language which could not be understood by the computer. Instead of using symbols in program flowchart pseudocode use structures which resembles with computer instructions. It is also known as program design language.

Introduction to PHP





What is PHP ?

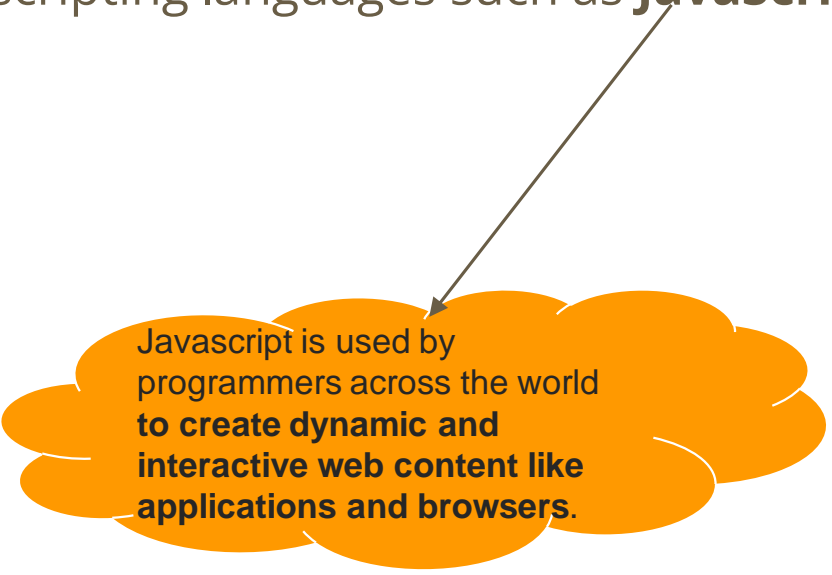
- PHP stand for **P**HP: **H**ypertext **P**reprocessor
- PHP is the widely used open source scripting language
- PHP scripts executed on server
- PHP is free to download and use

What is a PHP file?

- PHP files may contain text, javascript, HTML and PHP code
- PHP code written in a php file executed in server and the result will be shown in a browser window as plain **HTML**
- PHP files having extension '**.php**'

HTML : HyperText Markup Language

The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. With HTML you can create your own Website. It can be assisted by technologies such as **Cascading Style Sheets(CSS)** and scripting languages such as **JavaScript**



JavaScript is used by programmers across the world to create dynamic and interactive web content like applications and browsers.



CSS is a design language that makes a website look more appealing than just plain or uninspiring pieces of text.

SAMPLE HTML CODE

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

SAMPLE PHP CODE

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

<?php
// PHP CODES BELOW
echo "My first PHP script!";
?>

</body>
</html>
```


Why PHP?

- ▶ PHP runs on different platforms (Windows, Linux, Unix, Mac OS X, etc.)
- ▶ PHP is compatible with almost all servers used today (Apache, IIS, etc.)
- ▶ PHP has support for a wide range of databases
- ▶ PHP is free. Download it from the official PHP resource: www.php.net
- ▶ PHP is easy to learn and runs efficiently on the server side

Set Up PHP on Your Own PC

- ▶ However, if your server does not support PHP, you must:
- ▶ install a web server
- ▶ install PHP
- ▶ install a database, such as MySQL
- ▶ The official PHP website (PHP.net) has installation instructions for
PHP: <http://php.net/manual/en/install.php>

Installing a server:

- An easy way to acquire an Apache server, along with PHP and MySQL built in (you'll need these when using PHP), is using
- WAMP (Windows) or,
- MAMP (Mac) (<http://www.mamp.info>)
- LAMP (Linux)

You can download WAMP at
<http://www.wampserver.com/en/>

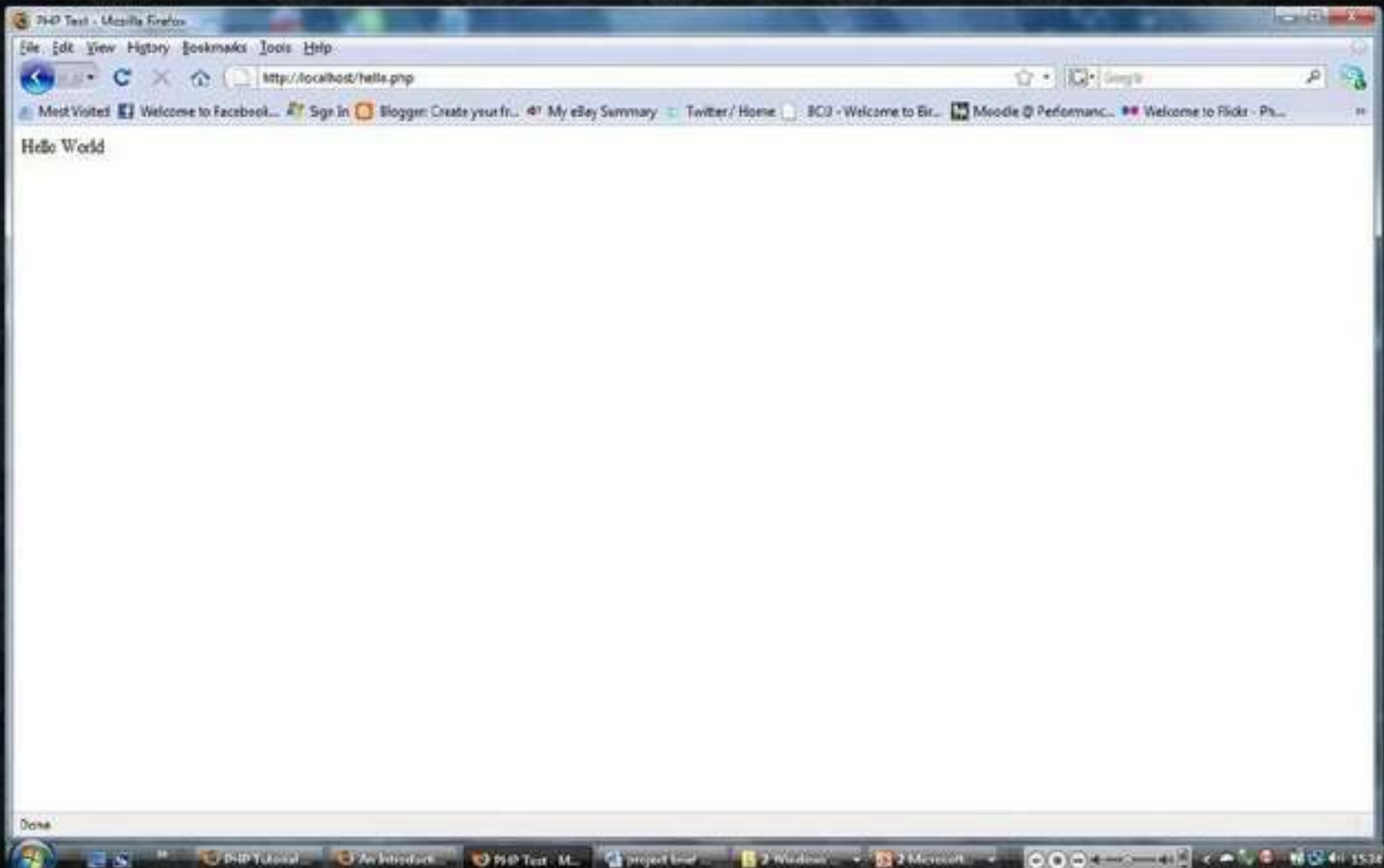
Step 2:

- Once you have followed the online instructions for installing and configuring WAMP, you need to check it works!
- Open notepad (php can be added straight into your html) and type:

```
<html>
<head>
<title>PHP Test</title>
</head>
<body>
<?php echo '<p>Hello World</p>'; ?>
</body>
</html>
```

Testing:

- Save this as 'hello.php' in your 'www' folder located within your WAMP folder.
- This can be done by selecting 'all files' when saving rather than the default '.txt'
- (Note: you can also just type this script straight into a new document in Dreamweaver if preferred)
- Now preview by opening your browser and entering <http://localhost/hello.php>
- Your page should look like this...



Web Application security Basics

Web application security (also known as Web AppSec) is the idea of building websites to function as expected, even when they are under any cyber attack. The concept involves a collection of security controls that provides the Web application the ability to protect its assets from potentially malicious agents.

Web security testing aims to find security **vulnerabilities** in Web applications and their configuration. Testing the security of a Web application often involves sending different types of input to provoke errors and make the system behave in unexpected ways. These so called “negative tests” examine whether the system is doing something it isn’t designed to do.

It is also important to understand that Web security testing is not only about testing the security features (e.g., authentication and authorization) that may be implemented in the application. It is equally important to test that other features are implemented in a secure way .

Major Web Application Attacks

- SQL Injection
- XSS (Cross Site Scripting)
- Remote Command Execution
- Path Traversal

Attack Results

- Access to restricted content
- Compromised user accounts
- Installation of malicious code
- Lost sales revenue
- Loss of trust with customers
- Damaged brand reputation
- And much more

OWASP

The Open Web Application Security Project is an online community that produces freely-available articles, methodologies, documentation, tools, and technologies in the field of web application security. The Open Web Application Security Project provides free and open resources.

eForms.IN Website Basics

Previously, the process of getting enrolled in NIC services depended on paperwork, however, with rapid technological changes, the process of filling forms online came into existence. With the eForms, this entire process, right from filling forms till availing services; it has become completely automated and manageable.

eForms has now been integrated with NIC Single Sign-On Platform (Parichay).

Major Services

1. **Email (@gov.in)**
2. **Authentication Service (LDAP)**
3. **Distribution List Service**
4. **IMAP/POP**
5. **IP Change Request**
6. **SMS Service**
7. **SMTP Gateway Service**
8. **Update Mobile in (@gov)**
9. **WIFI Service**
10. **WIFI Port Service**
11. **DNS Services**
12. **VPN Service**

**NETWORK
AND
NETWORKING**



Advantages of Network

Share the software resources

Share the Hardware resources

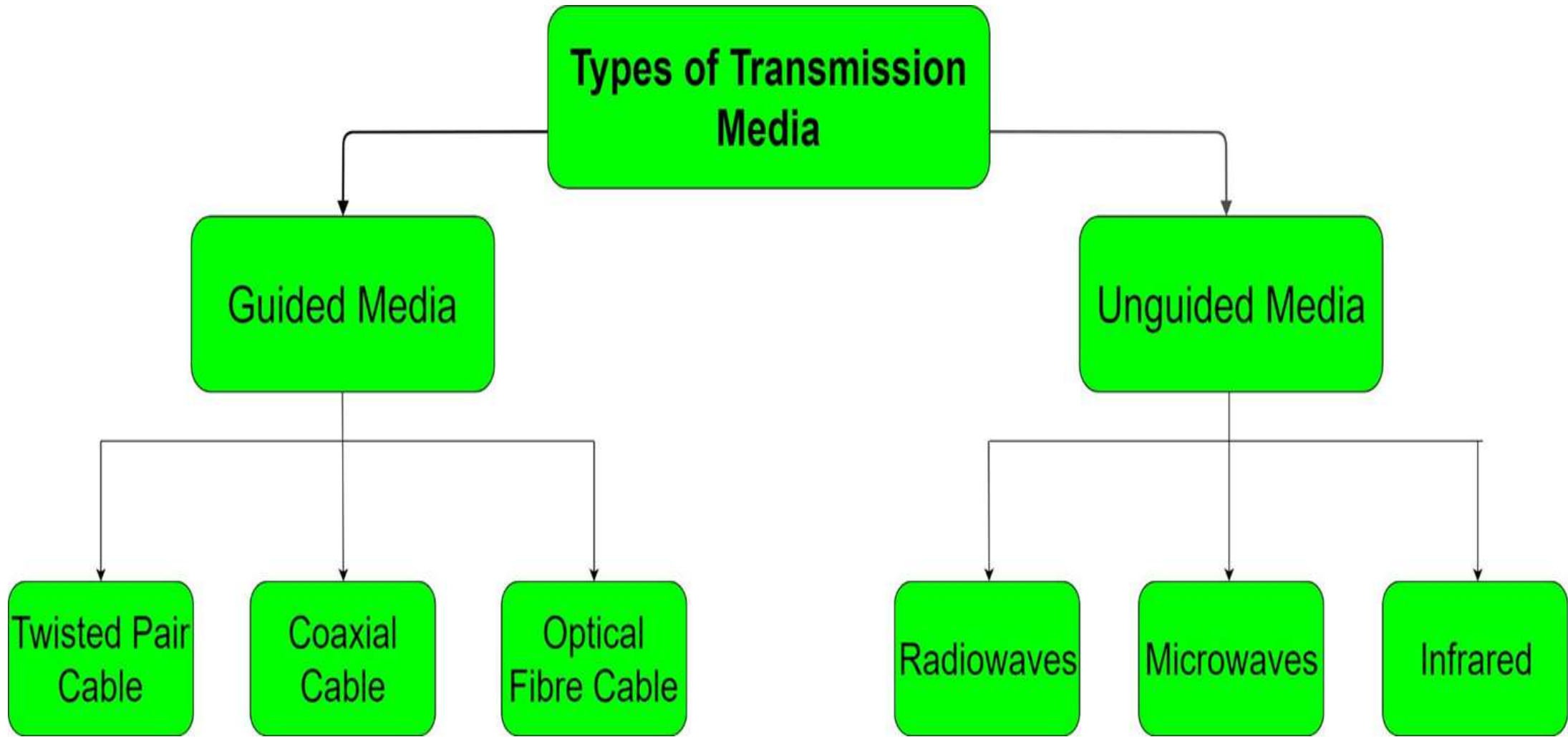
Implement security

Components of Network

1. System
2. NIC
3. Media
4. Connecting device

00:00:5e:00:53:af



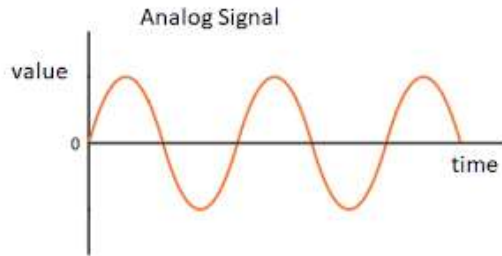


Signal Transmission

- Base band



- Broad band



Transmission Method

- Unicast
- Multicast
- Broad cast

Transmission Mode

- Simplex
- Half duplex
- Full duplex

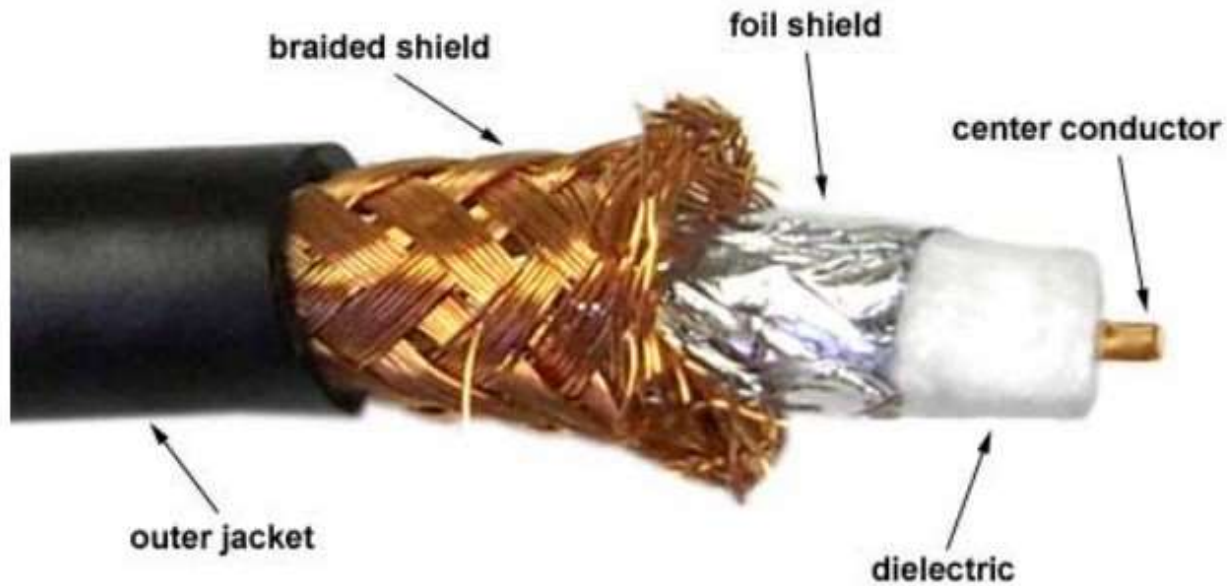
Things to affect media

- Attenuation
- EMI
- Cross Talk

What is bandwidth

Coaxial Cable

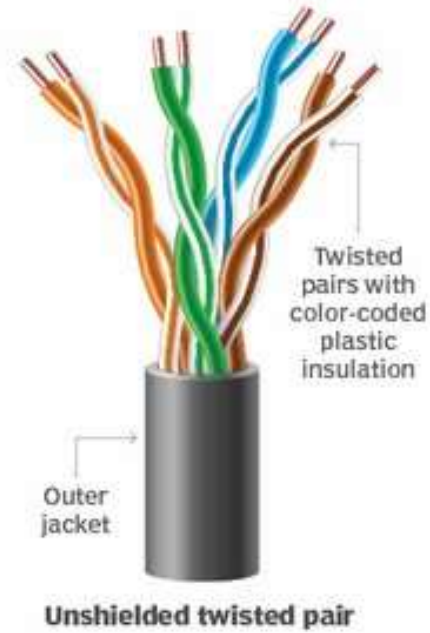
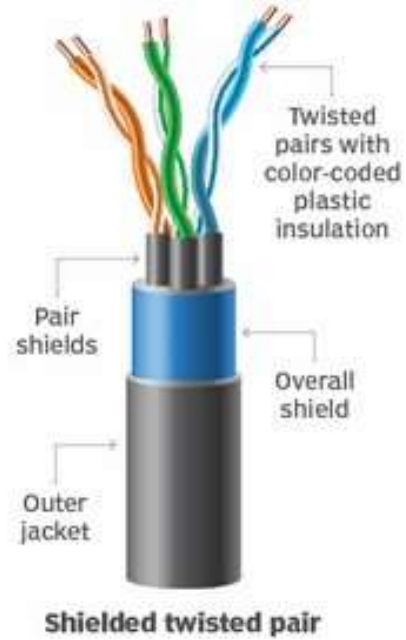
COAXIAL CABLE



Connector



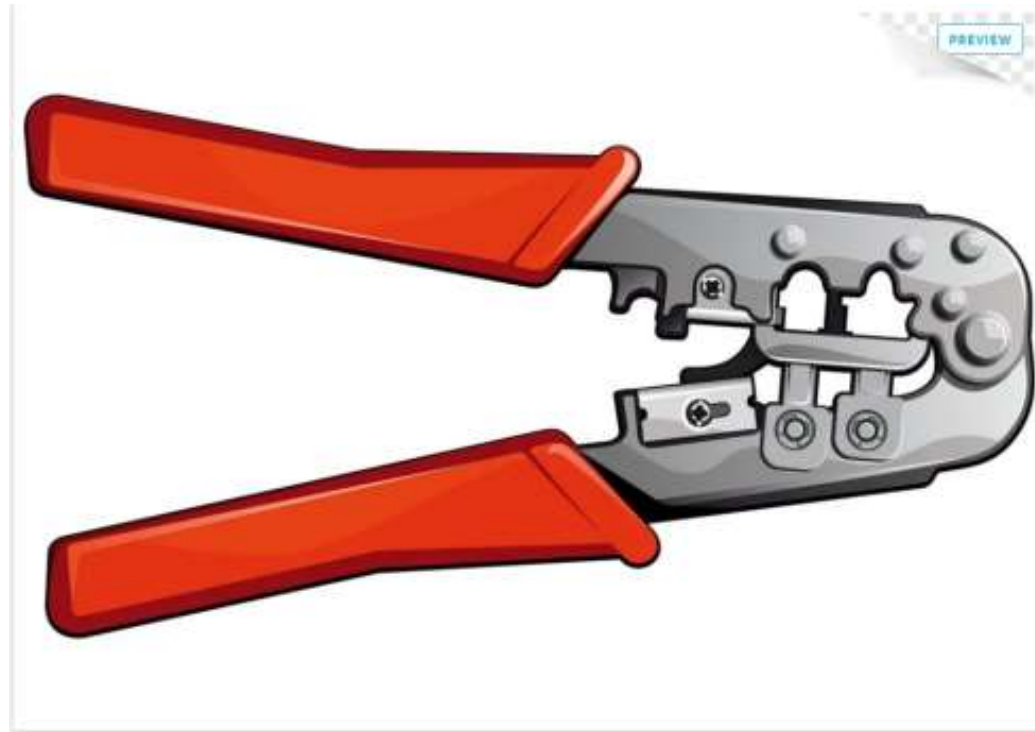
Twisted pair cable



Connector



Crimping



	568A	568B
1	Green/White	Orange/White
2	Green	Orange
3	Orange/white	Green/White
4	Blue	Blue
5	Blue/White	Blue/White
6	Orange	Green
7	Brown/White	Brown/White
8	Brown	Brown

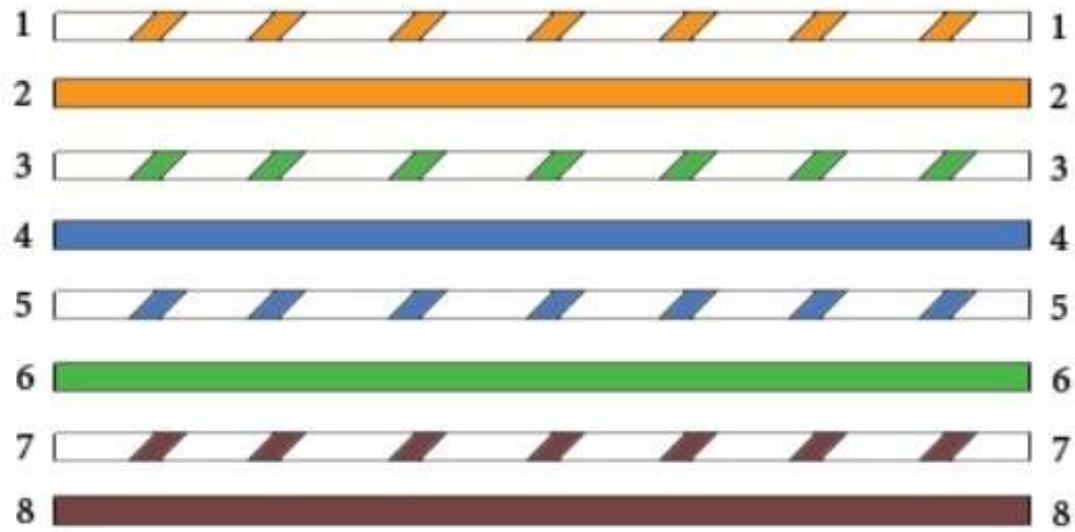
Crimping Methods

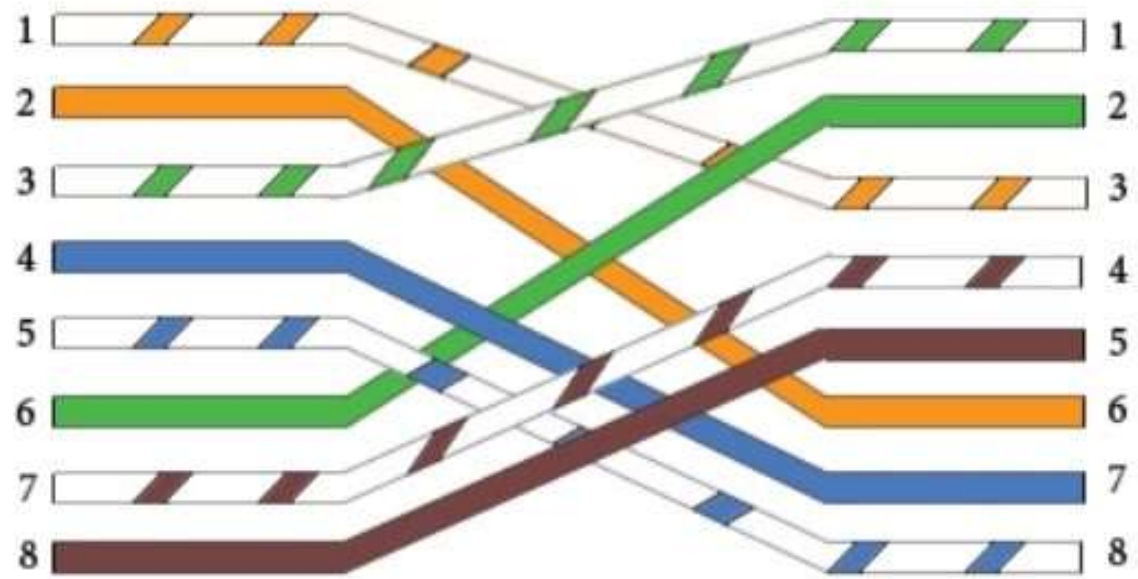
Straight through crimping

Cross over crimping

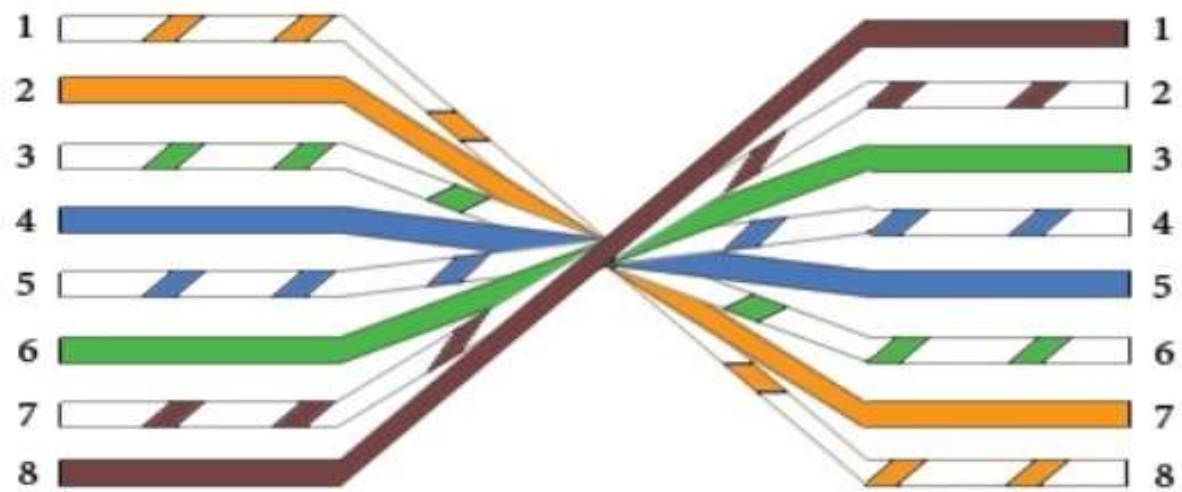
Roll over crimping

Straight Through Wiring Guide
568-B





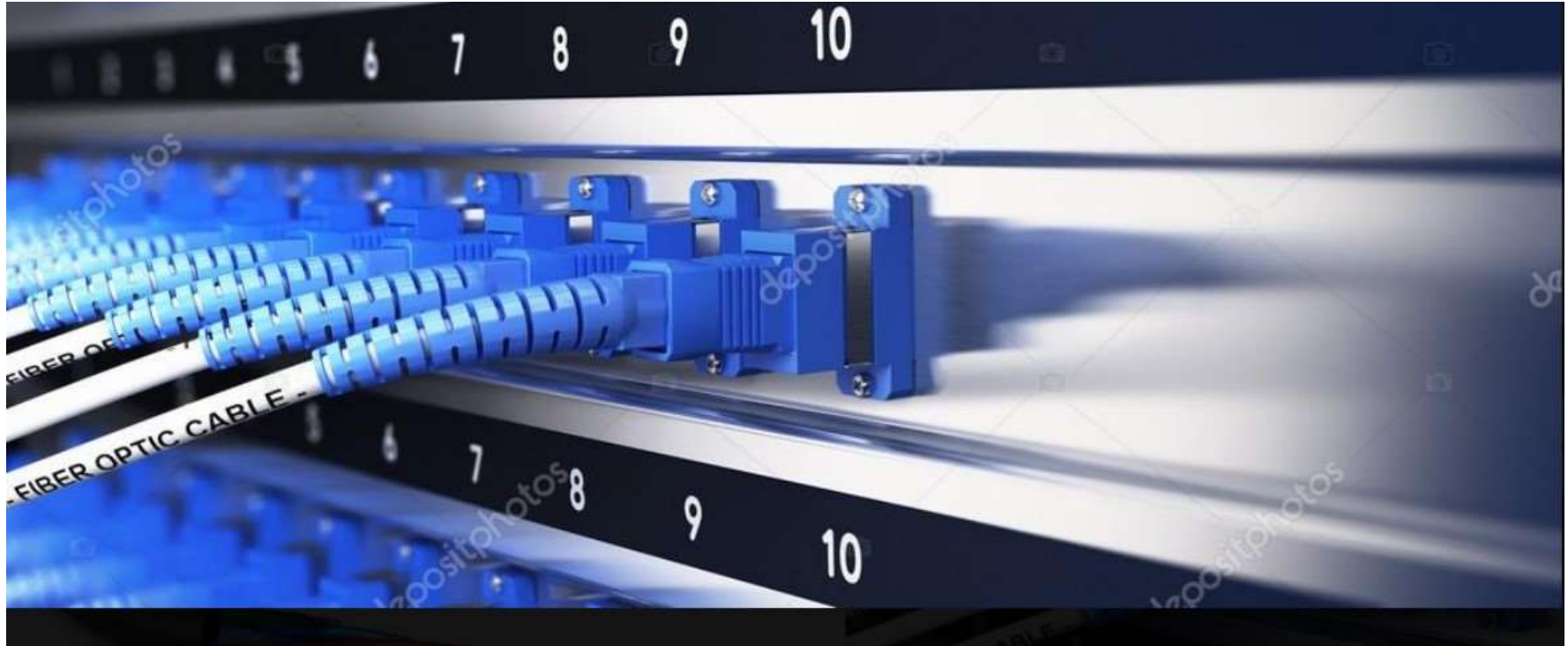
Rollover Wiring Guide
568-B



OFC



OFC connector



PROTOCOL

- NetBEUI
- TCP/IP
- IPX/SPX

IP Address

- IPv4
- IPv6

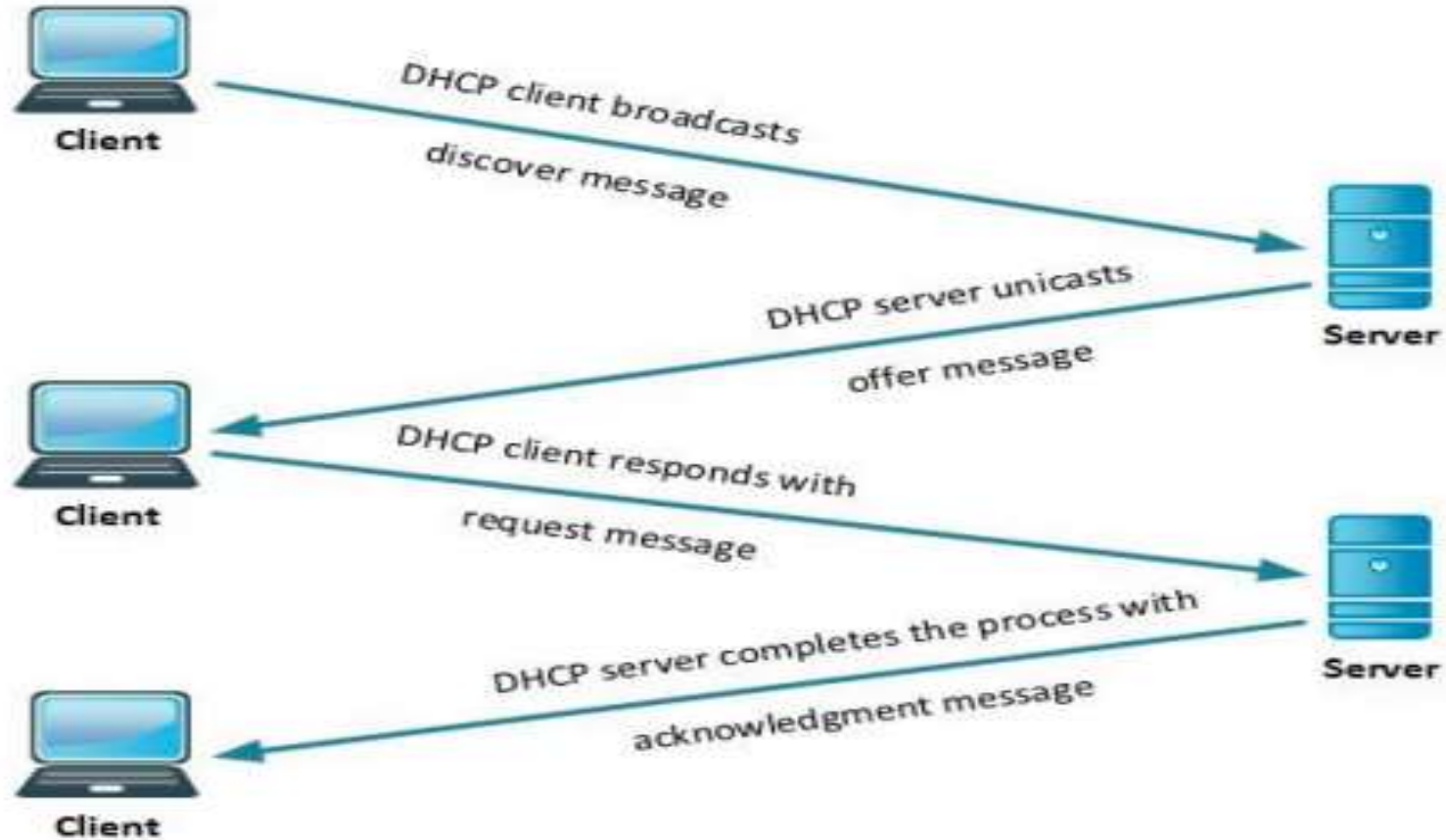
Subnet mask

Network portion-Host portion

129.137.130.131

	Class	First octet	Default subnet mask
unicast	A	1-126	255.0.0.0
unicast	B	128-191	255.255.0.0
unicast	C	192-223	255.255.255.0
multicast	D	224-239	
Laboratory	E	240-255	

DHCP



Router and Switch Configuration Live Demo

Port security

MAC binding

Live Demo

Firewall

A firewall is a network security device that monitors incoming and outgoing network traffic and decides whether to allow or block specific traffic based on a defined set of security rules.

Types of firewalls

Proxy firewall

Proxy servers can provide additional functionality such as content caching and security by preventing direct connections from outside the network

Stateful inspection firewall

It allows or blocks traffic based on state, port, and protocol. It monitors all activity from the opening of a connection until it is closed. Filtering decisions are made based on both administrator-defined rules as well as context, which refers to using information from previous connections and packets belonging to the same connection.

Unified threat management (UTM) firewall

The functions of a stateful inspection firewall with intrusion prevention and [antivirus](#). It may also include additional services and often cloud management

Why NGFW

Next-generation firewall (NGFW)

Firewalls have evolved beyond simple packet filtering and stateful inspection. Most companies are deploying [next-generation firewalls](#) to block modern threats such as advanced malware and application-layer attacks.

Threat-focused NGFW

Include all the capabilities of a traditional NGFW and also provide advanced threat detection and remediation.

Data Management and Security

Data management and security

- Database concepts - POSTGRES,MYSQL
- Client tools - PGAdmin4,HeidiSQL, SQL Server Management Studio, PHPMyAdmin
- Database security basics
- Database connection sample code in PHP
- Brief idea about SQL
- Data fidelity and privacy

Let's get started...

The importance of well-presented data cannot be understated in today's digitally advanced landscape. All the IT enabled services and complex software applications rely on organized data for solving the enormous requirements. This has been made possible only through organized data. Organized data can be any representation of data that allows you to gather insights.

How is organized data stored efficiently?

The most efficient way to store data is with the help of a **relational database**. A relational database consists of 3 high-level components:

- Tables
- Relationships
- Keys

Relational vs Non-Relational Databases

To summarize the difference between the relational and non-relational databases: relational databases store data in rows and columns like a spreadsheet while in non-relational database is a database that does not use the tabular schema of rows and columns found in most traditional database systems. non-relational databases use a storage model that is optimized for the specific requirements of the type of data being stored

Relational DB

- ★ POSTGRESQL
- ★ MYSQL
- ★ ORACLE
- ★ IBM DB2
- ★ MS SQL SERVER
- ★ SQLITE

Non Relational DB

- ★ MONGODB
- ★ CASSANDRA
- ★ Amazon DynamoDB
- ★ HBase
- ★ Apache CouchDB

Non-Relational Databases and NoSQL

A *non-relational database* is a database that does not use the tabular schema of rows and columns found in most traditional database systems. Instead, non-relational databases use a storage model that is optimized for the specific requirements of the type of data being stored. For example, data may be stored as simple key/value pairs, as JSON documents, or as a graph consisting of edges and vertices.

The term *NoSQL* refers to data stores that do not use SQL for queries. Instead, the data stores use other programming languages and constructs to query the data.

Non Relational DB

- ★ MONGODB
- ★ CASSANDRA
- ★ Amazon DynamoDB
- ★ HBase
- ★ Apache CouchDB

The benefits of a non-relational database

Today's applications collect and store increasingly vast quantities of ever more complex customer and user data. There are several advantages to using non-relational databases, including:

- **Massive dataset organization**
In the age of Big Data, non-relational databases can not only store massive quantities of information, but they can also query these datasets with ease. Scale and speed are crucial advantages of non-relational databases.
- **Flexible database expansion**
Data is not static. As more information is collected, a non-relational database can absorb these new data points, enriching the existing database with new levels of granular value even if they don't fit the data types of previously existing information.
- **Multiple data structures**
The data now collected from users takes on myriad forms, from numbers and strings, to photo and video content, to message histories. A database needs the ability to store these various information formats, understand relationships between them, and perform detailed queries.
- **Built for the cloud**
A non-relational database can be massive. And as they can, in some cases, grow exponentially, they need a hosting environment that can grow and expand with them. The cloud's inherent scalability makes it an ideal home for non-relational databases.

Client tools -

- 1. PgAdmin4 :-** PGAdmin is a web-based GUI tool used to interact with the Postgres database sessions, both locally and remote servers as well. You can use PGAdmin to perform any sort of database administration required for a Postgres database.
- 2. HeidiSQL :-** HeidiSQL is a free and open-source administration tool for MySQL and its forks, as well as Microsoft SQL Server, PostgreSQL and SQLite.
- 3. PhpMyAdmin :-** phpMyAdmin is a free and open source administration tool for MySQL and MariaDB. As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting services.
- 4. SQL Server Management Studio :-** SQL Server Management Studio is a software application first launched with Microsoft SQL Server 2005 that is used for configuring, managing, and administering all components within Microsoft SQL Server.

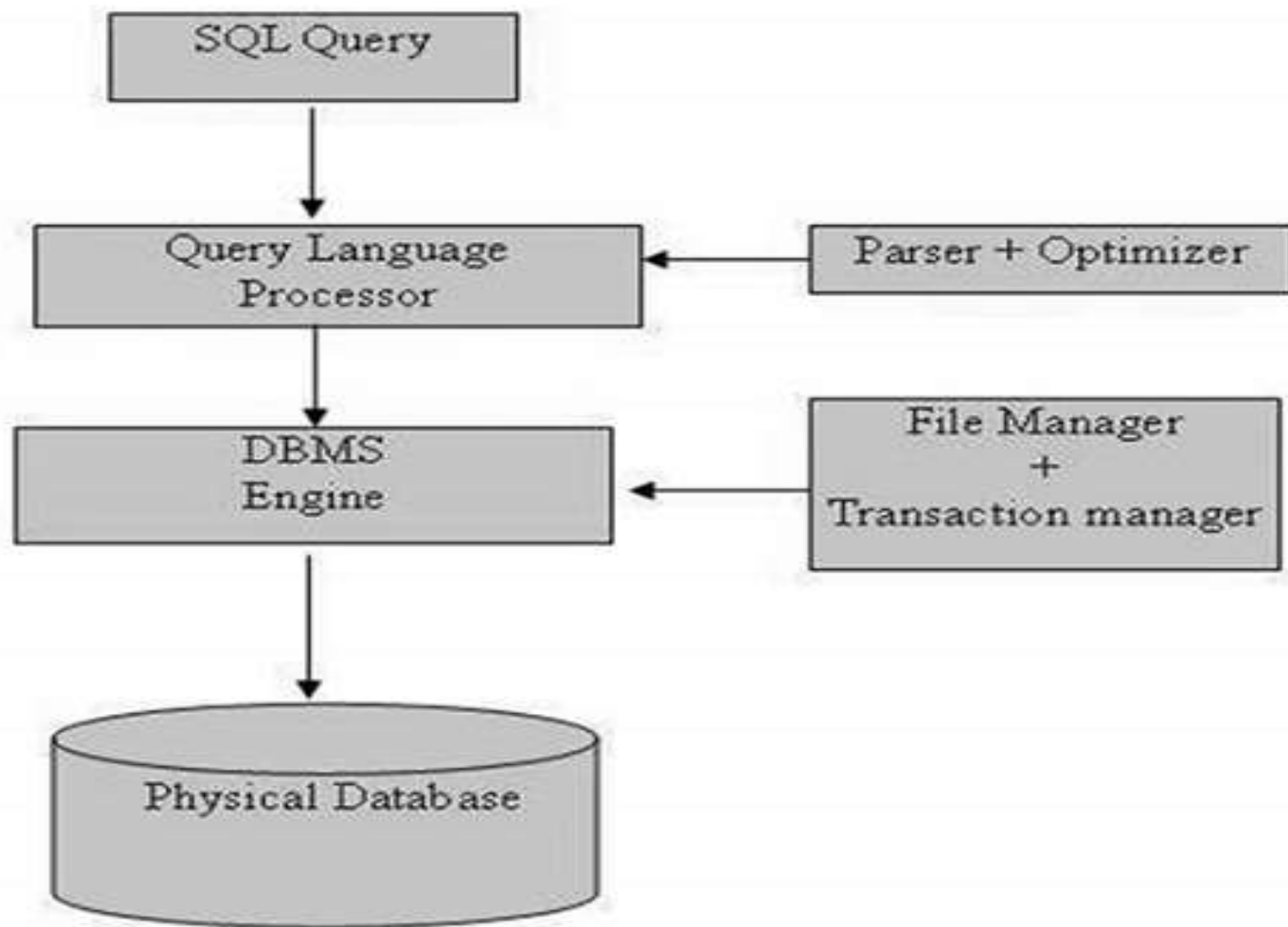
SQL - Structured Query Language

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in a relational database.

SQL is the standard language for Relational Database System. All the Relational Database Management Systems (RDMS) like MySQL, MS Access, Oracle, Sybase, Informix, Postgres and SQL Server use SQL as their standard database language.

SQL Commands

The standard SQL commands to interact with relational databases are CREATE, SELECT, INSERT, UPDATE, DELETE and DROP.



Database security basics

Database security refers to **the various measures organizations take to ensure their databases are protected from internal and external threats**. Database security includes protecting the database itself, the data it contains, its database management system, and the various applications that access it.

Five tips for keeping your database secure

- Control access to the database.
- Identify sensitive and critical data.
- Encrypt information.
- Anonymize non-productive databases.
- Monitor your database activity.

Anonymize non-productive databases :- Avoid making a copy of the original database and start to use it in environments that are much less tightly controlled, thus exposing all the sensitive information.

Database Security Threats

Insider Threats

An insider threat is a security risk from one of the following three sources, each of which has privileged means of entry to the database:

A malicious insider with ill-intent

A negligent person within the organization who exposes the database to attack through careless actions

An outsider who obtains credentials through social engineering or other methods, or gains access to the database's credentials

Human Error

Weak passwords, password sharing, accidental erasure or corruption of data, and other undesirable user behaviors are still the cause of almost half of data breaches reported.

Malware

Malware is software written to take advantage of vulnerabilities or to cause harm to a database. Malware could arrive through any endpoint device connected to the database's network. Malware protection is important on any endpoint, but especially so on database servers, because of their high value and sensitivity.

Database Security Threats

Exploitation of Database Software Vulnerabilities

Attackers constantly attempt to isolate and target vulnerabilities in software, and database management software is a highly valuable target. New vulnerabilities are discovered daily, and all open source database management platforms and commercial database software vendors issue security patches regularly. However, if you don't use these patches quickly, your database might be exposed to attack.

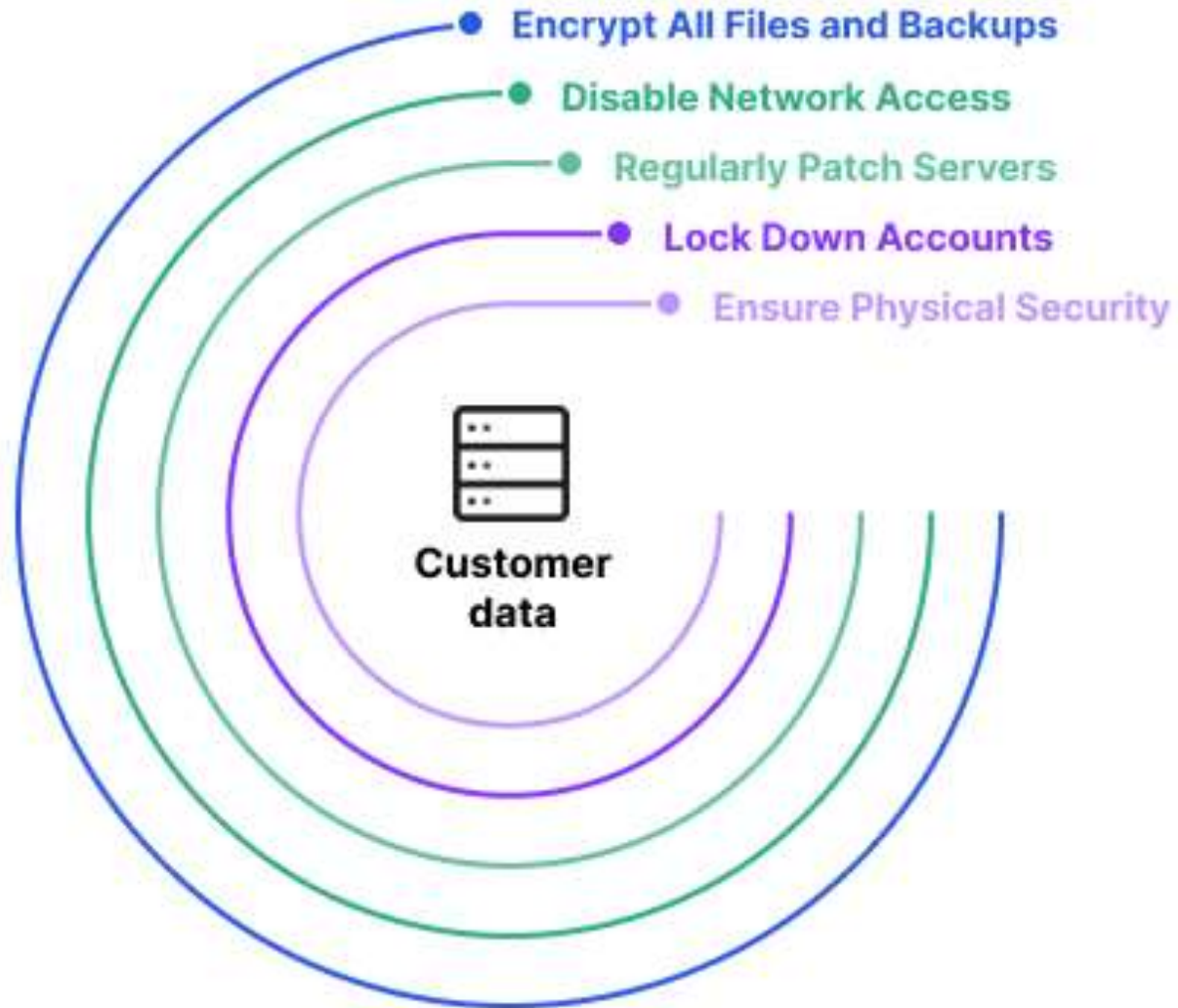
SQL/NoSQL Injection Attacks

A database-specific threat involves the use of arbitrary non-SQL and SQL attack strings into database queries. Typically, these are queries created as an extension of web application forms, or received via HTTP requests. Any database system is vulnerable to these attacks, if developers do not adhere to secure coding practices, and if the organization does not carry out regular vulnerability testing.

Denial of Service (DoS/DDoS) Attacks

In a denial of service (DoS) attack, the cybercriminal overwhelms the target service—in this instance the database server—using a large amount of fake requests. The result is that the server cannot carry out genuine requests from actual users, and often crashes or becomes unstable.

How Can You S



Data fidelity and privacy

Data fidelity is the accuracy with which data quantifies and embodies the characteristics of the source.

Data privacy generally means the ability of a person to determine for themselves when, how, and to what extent personal information about them is shared with or communicated to others.

```
<?php
$servername = "localhost";
$dbname = "database";
$username = "username";
$password = "password";
// Create connection
$conn = mysqli_connect($servername, $username, $password, $dbname);
// Check connection
if ($conn->connect_error) {
die("Connection failed: " . $conn->connect_error);
}
echo "Connected successfully";
mysqli_close($conn); ?>
```

Hardware Management & Maintenance



Topics

**Topic 1- Need for
optimisation in
utilization of
hardware
resources**

Topic 1- Need for optimisation in utilization of hardware resources

Correct requirement analysis- taking into account of existing stock of hardware and anticipated requirements.

Important factors to take into account- Delay in procurement process, replacement of devices at the end of its life cycle, availability of AMC and buffer stock, introduction of new applications eg- paperless courts, VC Courts etc.

How to optimally use hardware resources

- Always opt for latest technology updates in the market-
- Desktops for office work- Minimum 8GB RAM and 256 GB SSD- Faster booting better performance.
- Printers- Always opt for Duplex printers with ethernet connectivity - Network printer- Less printer offline problem, Maximum sharing.
- Scanners- Folder sharing from the PC connected with the scanner-
- If there is high printing, scanning and copying function- Go for a MFD having network connectivity- For occasional colour printing go for cartridge colour printers
- For on-premise servers go for server virtualisation e.g- VMWARE (hypervisor)- Multiple Virtual machines in the same server.

Topics

**Topic 2- Data
Management
regarding Available
Hardware resources.**

2. Data Management regarding Available Hardware resources.

The screenshot displays a hardware management dashboard. At the top, there are four inventory cards: Desktop PCs (627 In Stock), Laptops (189 In Stock), Tablets (2 In Stock), and Server (14 In Stock). A left sidebar contains navigation buttons for MASTERS, H/W ENTRY, H/W DISTRIBUTION, UPDATE H/W, S/W DISTRIBUTION, COMPLAINTS, and SEARCH & REPORTS. The main area is titled 'Hardware Entry' and includes a 'List H/W' button. Below the title, there are radio buttons for 'Single Entry' (selected) and 'Batch Upload'. The form contains several input fields: Device ID (5325), Serial No (Serial No), Item (Select), Make (Select), Model No (Model No), Invoice No (InventoryNo), Invoice Date (dd/mm/yyyy), Purchase Date (dd/mm/yyyy), Purchase Value (Purchase Value), Purchase Batch (Select), Warranty (Not Applicable), Warranty By (Select), and Warranty (dd/mm/yyyy).

Desktop PCs 627 **In Stock** | Laptops 189 **In Stock** | Tablets 2 **In Stock** | Server 14 **In Stock**

Hardware Entry [List H/W](#)

Single Entry Batch Upload

Device ID: 5325 | Serial No: Serial No | Item: Select | Make: Select

Model No: Model No | Invoice No: InventoryNo | Invoice Date: dd/mm/yyyy

Purchase Date: dd/mm/yyyy | Purchase Value: Purchase Value | Purchase Batch: Select

Warranty: Not Applicable | Warranty By: Select | Warranty: dd/mm/yyyy

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
	NO	FLOOR	SECTION/COURT	USER NAME	DESIGNATION	ASSET	SYSTEM ID	MAKE	OS VERSION	MONITOR MAKE	S/N	ID / SN	MODEL	ID / SN	MODEL	STATUS (IDLE/WORKING)	OTHER IT EQUIPMENTS DETAILS	REMARKS						
1																								
2	1	GROUND	STATIONARY	SUJA K C	SECTION OFFICER	DESKTOP	4328	HP	W10	HP	3CQ14904Q2													
3	2	GROUND	STATIONARY	BEJOY	SECTION OFFICER	DESKTOP	3566	LENOVO	W10	LENOVO	VKV56183													
4	3	GROUND	STATIONARY	GAYAK	ASSISTANT	DESKTOP	2521	LENOVO	U14	LENOVO	VKT62217													
5	4	GROUND	STATIONARY	GAYAK	ASSISTANT	PRINTER						2689	M100											
6	5	GROUND	STATIONARY	HARIKISHAN C S	ASSISTANT	DESKTOP	2546	LENOVO	U20	LENOVO	VK924580													
7	6	GROUND	STATIONARY	HARIKISHAN C S	ASSISTANT	SCANNER								3854	530 DS									
8	7	GROUND	STATIONARY	MUHAMMAD ANEES	ASSISTANT	DESKTOP	4418	HP	U20	LENOVO	3CQ1461PZ4													
9	8	GROUND	STATIONARY	UNNI S	ASSISTANT	DESKTOP	2591	LENOVO	U14	LENOVO	VK924271													
10	9	GROUND	STATIONARY	UNNI S	ASSISTANT	PRINTER						2764	M100											
11	10	GROUND	STATIONARY	AKHIL GEORGE	ASSISTANT SECTION	DESKTOP	2555	LENOVO	U14	LENOVO	VK924249													
12	11																							
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								

Change Management in Hardware

- Creation or logging of Request for change (RFC)
 - Review RFC
 - Approve or Authorize the change
 - Coordinate implementation
 - Review & Close change request
-

Topics

**Topic 3- Computers
printers & other
peripherals**

Commonly used Processors

Intel processors : i3, i5 and i7

Latest generation of intel processors : 12th Gen

AMD Processors: AMD Ryzen series processors (Ryzen3, Ryzen5 & ryzen7)

Processors for Servers: AMD EPYC, Intel Xeon Processors.

Processor Specifications - AMD processors

MODEL	GRAPHICS MODEL	# OF CPU CORES	# OF THREADS	MAX. BOOST CLOCK	BASE CLOCK	GRAPHICS CORE COUNT	DEFAULT TDP
AMD Ryzen™ 5 PRO 5650G	Radeon™ Graphics	6	12	Up to 4.4GHz	3.9GHz	7	65W
AMD Ryzen™ 5 PRO 5650GE	Radeon™ Graphics	6	12	Up to 4.4GHz	3.4GHz	7	35W
AMD Ryzen™ 7 PRO 5750G	Radeon™ Graphics	8	16	Up to 4.6GHz	3.8GHz	8	65W

Processor Specifications - Intel processors.

Product Name	Status	Launch Date	# of Cores	Max Turbo Frequency	Processor Base Frequency	Cache	TDP	Processor Graphics ‡
<input type="checkbox"/> Intel® Core™ i5-12600HX Processor (18M Cache, up to 4.60 GHz)	Launched	Q2'22	12	4.60 GHz		18 MB Intel® Smart Cache		Intel® UHD Graphics for 12th Gen Intel® Processors
<input type="checkbox"/> Intel® Core™ i5-12450HX Processor (12M Cache, up to 4.40 GHz)	Launched	Q2'22	8	4.40 GHz		12 MB Intel® Smart Cache		Intel® UHD Graphics for 12th Gen Intel® Processors

Types of Printers - Office Purpose

- **Laser Printers** - A laser printer is a popular type of computer printer that uses a non-impact photocopier technology where there are no keys striking the paper. When a document is sent to the printer, a laser beam "draws" the document on a selenium-coated drum using electrical charges.
 - **Ink Tank Printers** - Ink tank printers have an inbuilt mechanism of supplying continuous ink, which helps lower the cost of printing. Filling up the tanks with ink is really simple too. Most models have the tanks built outside the printer's chassis.
 - **Multifunction Printers** - An MFP (multi-function product/printer/peripheral), multi-functional, all-in-one (AIO), or multi-function device (MFD), is an office machine which incorporates the functionality of multiple devices in one, so as to have a smaller footprint in a home or small business setting (the SOHO market segment), or to provide centralized document management/distribution/production in a large-office setting. A typical MFP may act as a combination of some or all of the following devices: fax, photocopier, printer, scanner.
-

Types of Printers - Office Purpose

- **Dot Matrix Printers** - A dot matrix printer (DMP) is a type of printer which uses pins impacting an ink ribbon to print. These printers are generally considered outdated, as they cannot create high-quality prints and are costly as well.

For Office purpose, Ink tank Printers and Multi Function devices are commonly preferred.

Types of Scanners- Office Purpose

- Flatbed scanners
- Sheetfed scanners
- Overhead scanners
- Handheld scanners.



Types of Scanners- Office Purpose

- **Flatbed Scanners** - A flatbed scanner is an optical scanner which makes use of a flat surface for scanning documents. The scanner is capable of capturing all elements on the document and does not require movement of the document. Flatbed scanners are effective scanners for delicate materials such as vintage photographs, papers and other documents which are fragile.



Types of Scanners- Office Purpose

- **Sheetfed Scanners** - A sheetfed scanner (also referred to as an *automatic document scanner* or ADF scanner) is a [digital imaging](#) system specifically designed for scanning loose sheets of paper, widely used by businesses to scan office documents and less frequently used by archives and libraries to scan books that have been disbound or other robust unbound documents. Sheetfed scanners may be compared in terms of the paper weight and size they are capable of handling, [duty cycle](#) rating, speed (pages per minute), and [duplex](#) capability.



Types of Scanners- Office Purpose

Overhead scanners :
The overhead scanner is used to scan books, periodicals and fragile documents.



Topics

Topic 4-

Video

Conferencing

Video Conferencing - Basic requirements

- **High resolution webcam** - The visibility of subtleties like facial expressions and body language are crucial to quality video conferencing. If details like these get lost, then meetings lack the authenticity of real-life, [face-to-face interactions](#).
 - **Fast Computer processing** - If your computer lacks a sufficiently fast processor, your audio and video quality will be downgraded to make the best possible call for your system's specs. For today's modern video conferencing of best quality, your computer should have a minimum 4 GB of RAM and a quad-core processor.
 - **Sufficient Network Bandwidth** - The effect of a slow network on video conferencing is similar to that of a slow computer processor: your call will dynamically adjust to give you the best possible quality with the available network. The [network bandwidth](#) required will depend on the resolution and frame rate you desire: 1 Mbps is sufficient for 15 fps at 720p resolution, while 30 fps at 4K will require closer to 4 Mbps.
-

Video Conferencing - Hardware requirements

Basic Components of a Video Conferencing System includes

- High Resolution Camera
- Display Screen
- Microphone

Microphone, camera & speaker composite devices are now a days available in the market.



Video Conferencing - Software requirements

A great video call is a combination of capable equipment, a robust network, reliable media transport with [TCP](#) and [UDP](#), and the software used to tie it all together. Video conferencing software becomes the portal for seeing your colleagues, partners and customers face to face, and it also handles the heavy encoding and decoding required for securely encrypting your calls and ensuring your audio and video are delivered in real-time.

Video Conferencing Software

Browser-based apps and desktop apps can make use of embedded cameras and microphones or connect to more robust peripherals through USB or Bluetooth connectivity. Apps like Google Hangouts™ are good for simple video calls but less so for video conference calls that need to account for more attendees, require connecting to meeting room devices and need the added levels of reliability and security for mission-critical meetings.

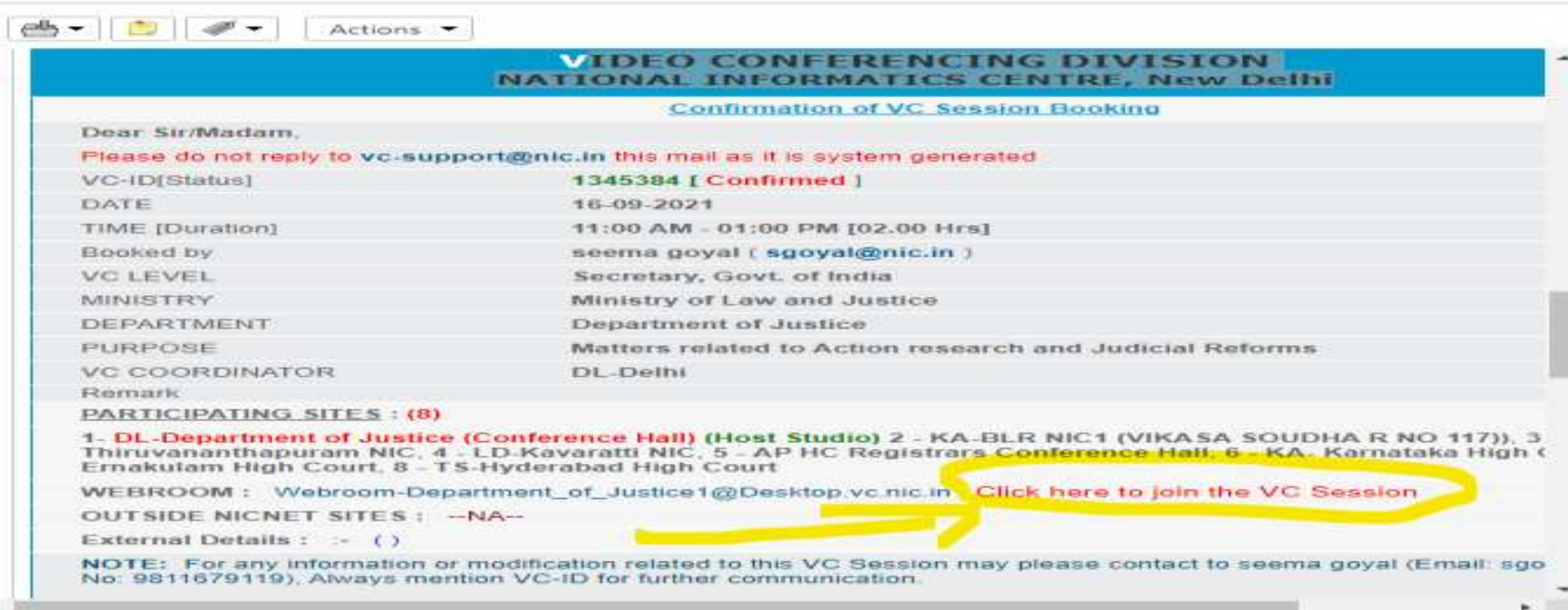
Software that is deeply integrated with your hardware is the key to simple connectivity and fully utilizing your system.

Popular Video Conferencing Softwares

- Google Meet  Google
 - Zoom 
 - Vidyo  Vidyo
 - Webex  webex
by CISCO
-

Video Conferencing through Vidyo

- Vidyo Connect is a VC app developed by NIC.



The image shows a screenshot of an email interface. At the top, there is a blue header bar with the text "VIDEO CONFERENCING DIVISION NATIONAL INFORMATICS CENTRE, New Delhi". Below this, the subject of the email is "Confirmation of VC Session Booking". The email body contains a greeting "Dear Sir/Madam," followed by a warning: "Please do not reply to vc-support@nic.in this mail as it is system generated". The main content is a list of details for the booked session, including VC-ID (1345384), Date (16-09-2021), Time (11:00 AM - 01:00 PM), and the organizer (Seema Goyal, Secretary, Govt. of India). A list of participating sites is provided, with the first site highlighted in red. A yellow circle highlights the link "Click here to join the VC Session" in the Webroom section. A yellow arrow points from the bottom of the circle to the "External Details" section.

Dear Sir/Madam,

Please do not reply to vc-support@nic.in this mail as it is system generated

VC-ID[Status] **1345384 [Confirmed]**

DATE 16-09-2021

TIME [Duration] 11:00 AM - 01:00 PM [02.00 Hrs]

Booked by seema goyal (sgoyal@nic.in)

VC LEVEL Secretary, Govt. of India

MINISTRY Ministry of Law and Justice

DEPARTMENT Department of Justice

PURPOSE Matters related to Action research and Judicial Reforms

VC COORDINATOR DL-Delhi

Remark

PARTICIPATING SITES : (8)

1- DL-Department of Justice (Conference Hall) (Host Studio) 2 - KA-BLR NIC1 (VIKASA SOUDHA R NO 117)), 3 Thiruvananthapuram NIC, 4 - LD-Kavaratti NIC, 5 - AP HC Registrars Conference Hall, 6 - KA- Karnataka High (Emakulam High Court, 8 - TS-Hyderabad High Court

WEBROOM : Webroom-Department_of_Justice1@Desktop.vc.nic.in [Click here to join the VC Session](#)

OUTSIDE NICNET SITES : --NA--

External Details : :- ()

NOTE: For any information or modification related to this VC Session may please contact to seema goyal (Email: sgoyal@nic.in No: 9811679119). Always mention VC-ID for further communication.

Browser tabs: <https://www.google.com/>, [My Drive - Google Drive](#), [IT hardware mgmt - Google](#), [Email Search results](#), <https://desktop.vc.nic.in/>, <https://web.vc.nic.in/do->

Address bar: desktop.vc.nic.in/flex.html?roomdirect.html&key=iHI078CVDm

Browser bookmarks: [Google](#), [History - Mrunal](#), [Stores Purchase Ru...](#), [Evernote shared no...](#), [UPSC / IAS Prepara...](#), [Flipkart Web Reader](#), [General Studies Blog](#), [7\(c\) The Ozone Layer](#), [Other bookmarks](#)

VidyoConnect

Enter your name

JOIN

Sign in before joining

Speakers (Realtek(R) Audio)
 Test sound

Microphone (Realtek(R) Audio)
 Test sound

No camera

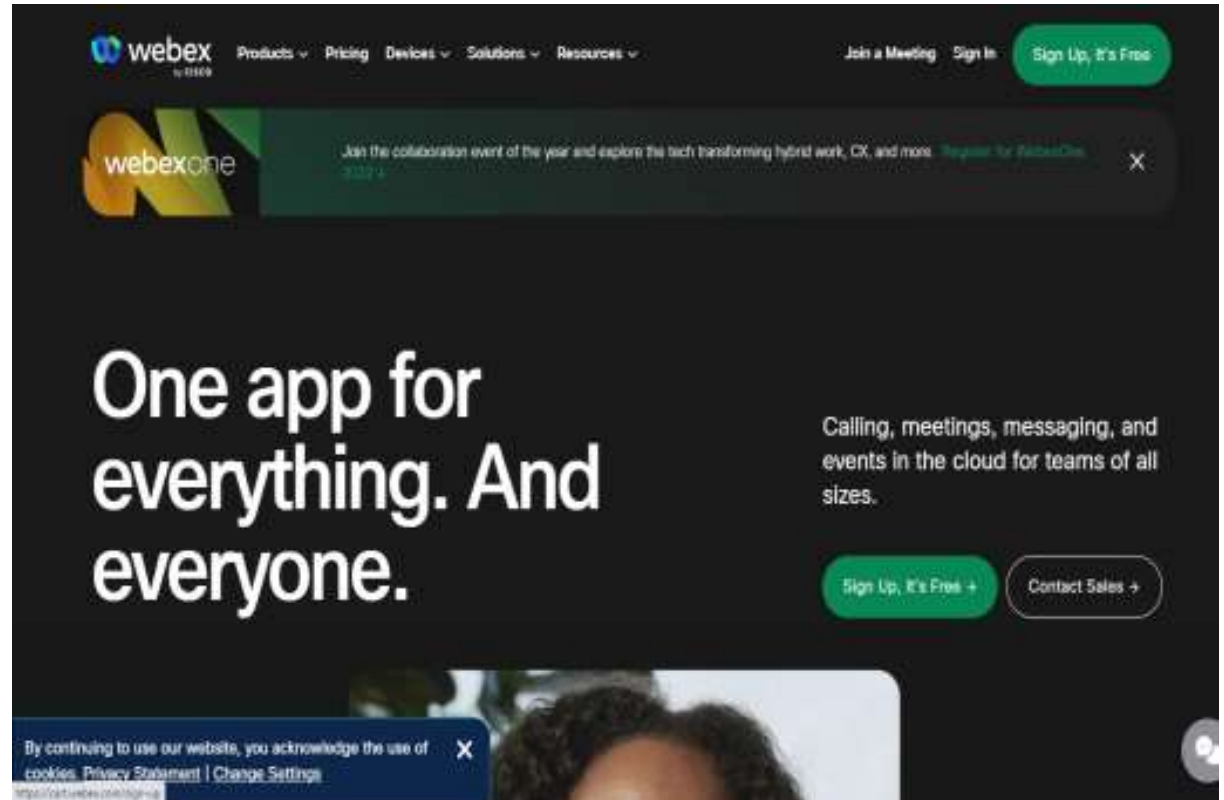
Camera off

System tray: 75°F Cloudy, Windows taskbar icons, ENG US, 14:31, 01-09-2022

Video Conferencing through CISCO

Webex

Step 1 : Sign Up in
<https://www.webex.com/>

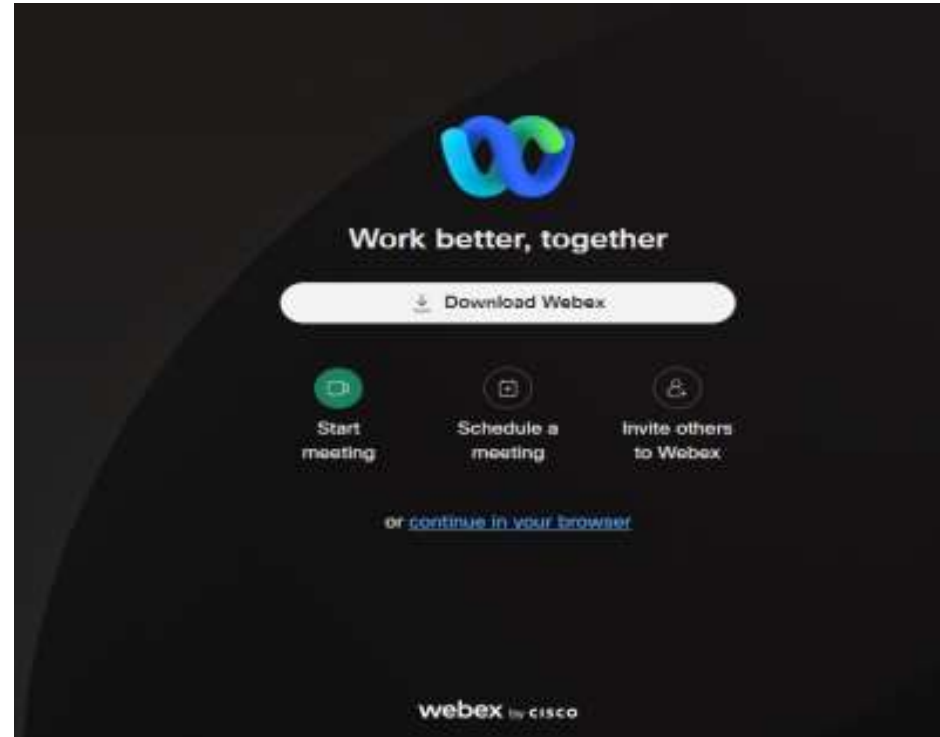


Video Conferencing through CISCO

Webex

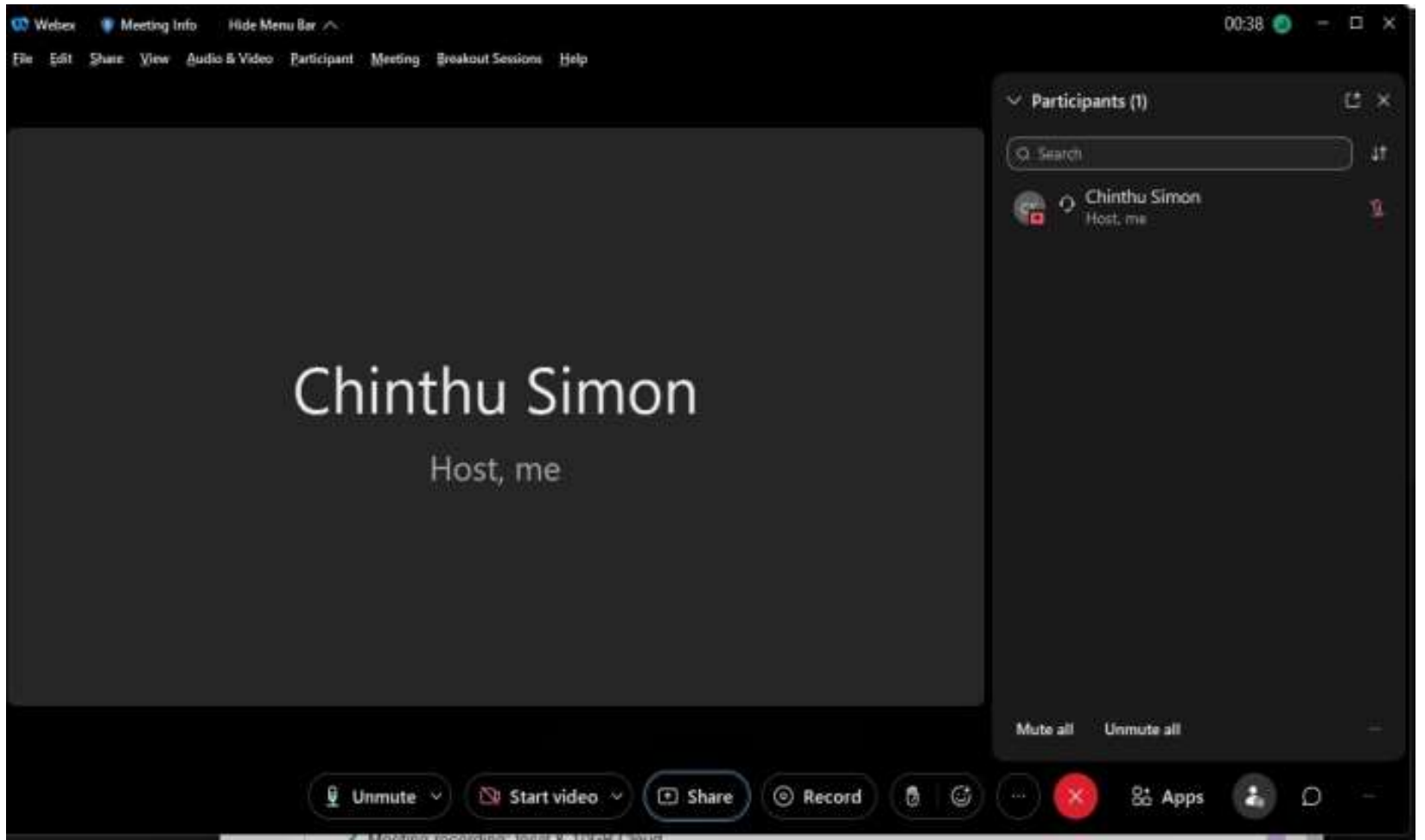
Step 2 : You can either continue in Web or will be prompted to download and install the desktop application.

Step 3 : You can either start an instant meeting or schedule a meeting.



Video Conferencing through CISCO Webex

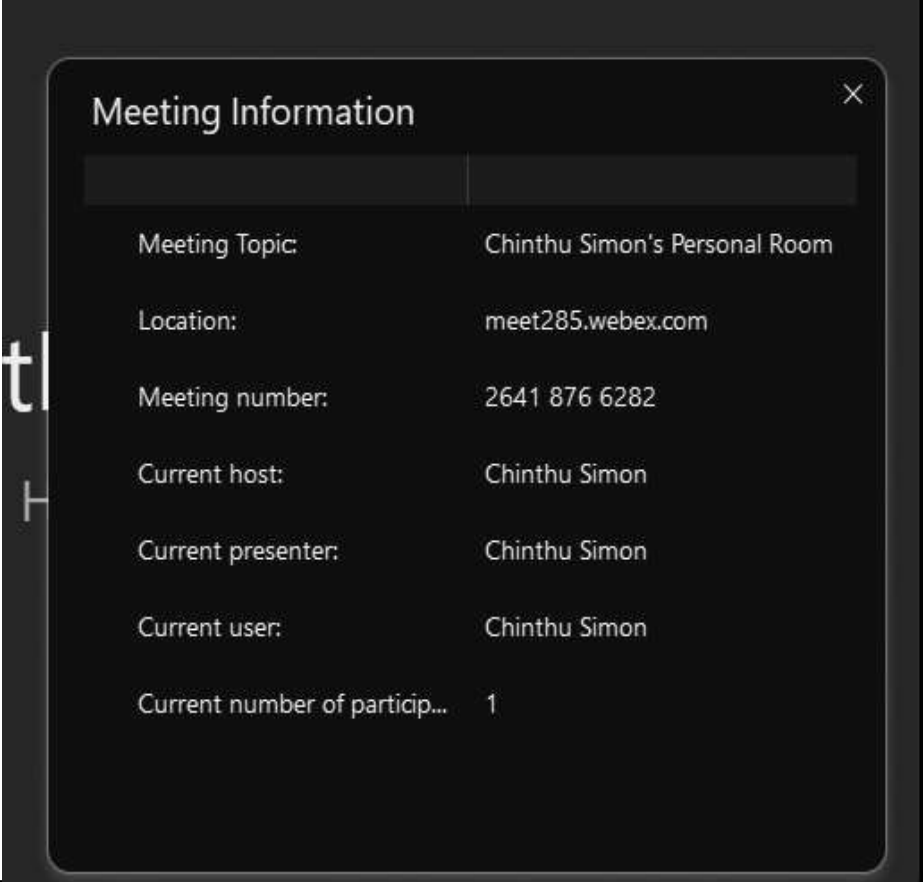
Window
after
starting the
meeting



Video Conferencing through CISCO

Webex

Important Options :
Meeting information



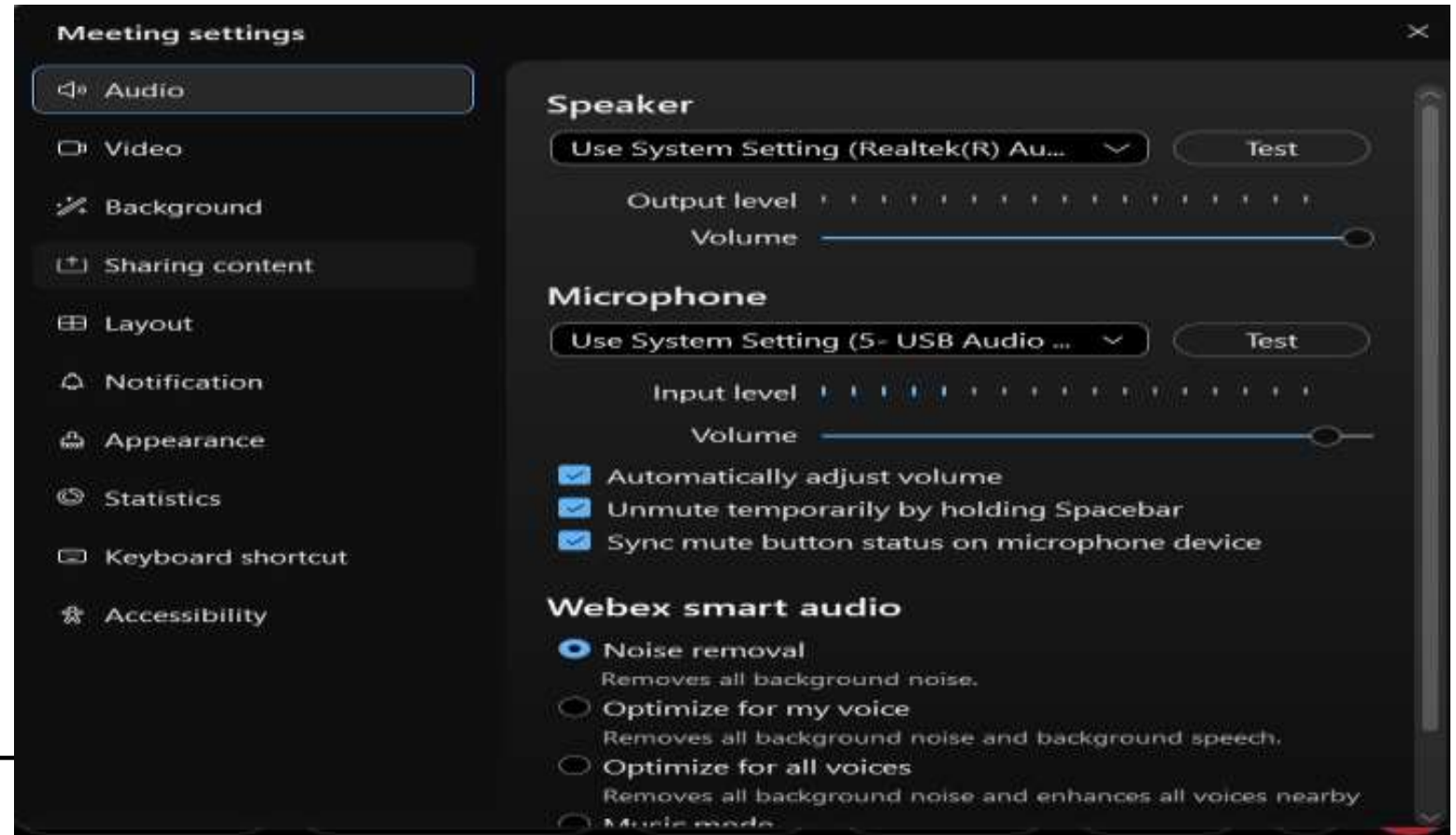
A screenshot of a Webex Meeting Information dialog box. The dialog has a dark background and a title bar with a close button (X). The content is organized into a table with two columns: labels and values.

Meeting Information	
Meeting Topic:	Chinthu Simon's Personal Room
Location:	meet285.webex.com
Meeting number:	2641 876 6282
Current host:	Chinthu Simon
Current presenter:	Chinthu Simon
Current user:	Chinthu Simon
Current number of particip...	1

Video Conferencing through CISCO

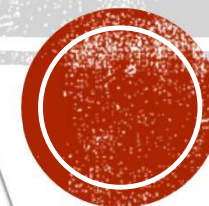
Webex

Important options:



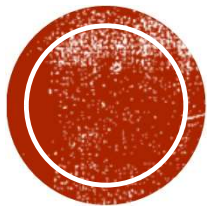


DIGITIZATION OF COURT RECORDS — AN OVERVIEW

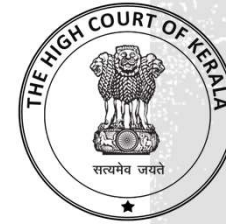




- The process of converting information from a physical format to a digital format is known as digitization.
- It is the process of converting anything non-digital into a digital representation that computer systems may use to automate processes or workflows
- In Document Management, Digitization refer to the process of scanning paper documents, converting them to electronic documents, capturing valuable information, and saving the document in a central repository for easy retrieval later.



- **Faster Access to Information**
- **Increased Productivity**
- **Lower Operational Cost**
- **Optimum Space Utilization.**
- **Improved Security**
- **Automation of Business Process**
- **Environment Friendly**
- **Disaster Recovery**
- **Improved User Experience**



ADVANTAGES



The proposal for digitisation was in furtherance of resolutions in Chief Justice's conference 2016.

The project for scanning and digitisation of case files in the High Court and District Judiciary is one of the flagship project approved by the e-Committee of the Supreme Court and Government of India.

The proposal will make “Less Paper” court a reality with ultimate aim of paperless courts.

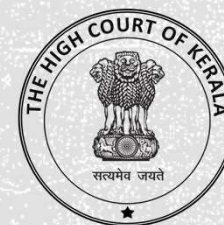


ESTIMATION OF THE NUMBER OF PAGES TO BE SCANNED AND DIGITIZED:

Total Number of pages to be digitized			
Description of Records			No. of Pages
Judicial Records (27,09,536 X 50 pages per file)			13,54,76,800
Administrative Records	R.Dis. (15847 X 250 pages per file)	39,61,750	76,33,750
	D.Dis. (9450 X 250 pages per file)	23,62,500	
	L.Dis.(26190 X 50 pages per file)	13,09,500	
Total Number of Pages			14,31,10,550

Judicial Records: 27,09,536 cases were filed in the High Court from 1959 to 2016. Assuming that there will be 50 pages in a case record, there will be around 13,54,76,800 pages of Judicial Records.

Administrative Records: Files on the Administrative Side are closed as **R.Dis.(Permanent Retention)**, **D.Dis.(10 Year Retention)** and **L.Dis.(3 Year Retention)**. There are **15847** R. Dis files from 1954 to 2016. Taking the ten year from 2000 to 2009 as the base period (Assuming that a file will be closed as D.Dis. after 5 years of its opening and it will be retained for another 10 years, there will be D.Dis. files only from the year 2000), an average of 630 files are closed as D.Dis. and 4365 files are closed as L.Dis. in a year. Assuming that a file will be closed as D.Dis. after 5 years of its opening, there will be 9450(630 files X 15 years) D.Dis. files to be digitized. Assuming that a file will be closed as L.Dis. after 3 years of its opening, there will be 26190 (4365 files X 6 years) L.Dis. files to be digitized.





Judicial Records at various Records Room - from (1959 - 2018) (in Lakhs)		
Sections	Total	%
OP - Records	21.00	63%
CRP - Records	5.50	17%
Criminal Records	2.65	8%
Writ Appeals	0.99	3%
GRS	3.10	9%
Total	33.24	

STOCK OF RECORDS 

DIGITIZATION PROCESS-

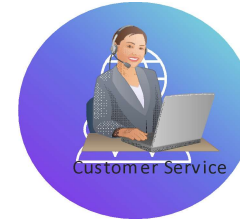


Digitization- Centre



Copy Center

Quality Assurance



Customer Service



Quality Assurance

Legal Department

Final Approval & Digital Signature

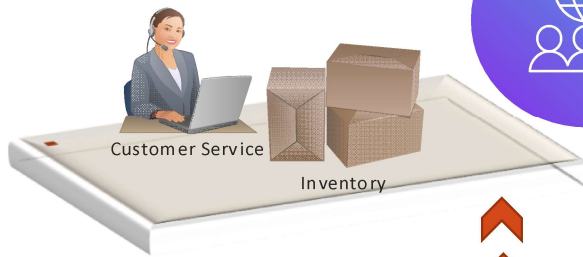
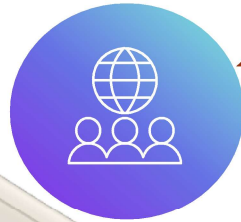


Quality Assurance

Uploading to server



Pre Scanning – Centre



Customer Service

Inventory

Records Section



Inventory

Inventory

Inventory

Packaging



The Digitization Process Workflow



Copy Center

Scanning – HC/Service Provider

- Indexing of files received from HC.
- Preparing for Scanning.
- Scanning
- Metadata entry,
- Quality Check (Image / Data Entry verification)



Quality Assurance

Quality checking – High Court.

- Quality checking of images.
- Checking of contents with physical files.
- Checking of metadata entry.
- Digitally sign in confirmation and uploading.
- Transfer of Physical files back to HC Record rooms.



Server

High Court Server

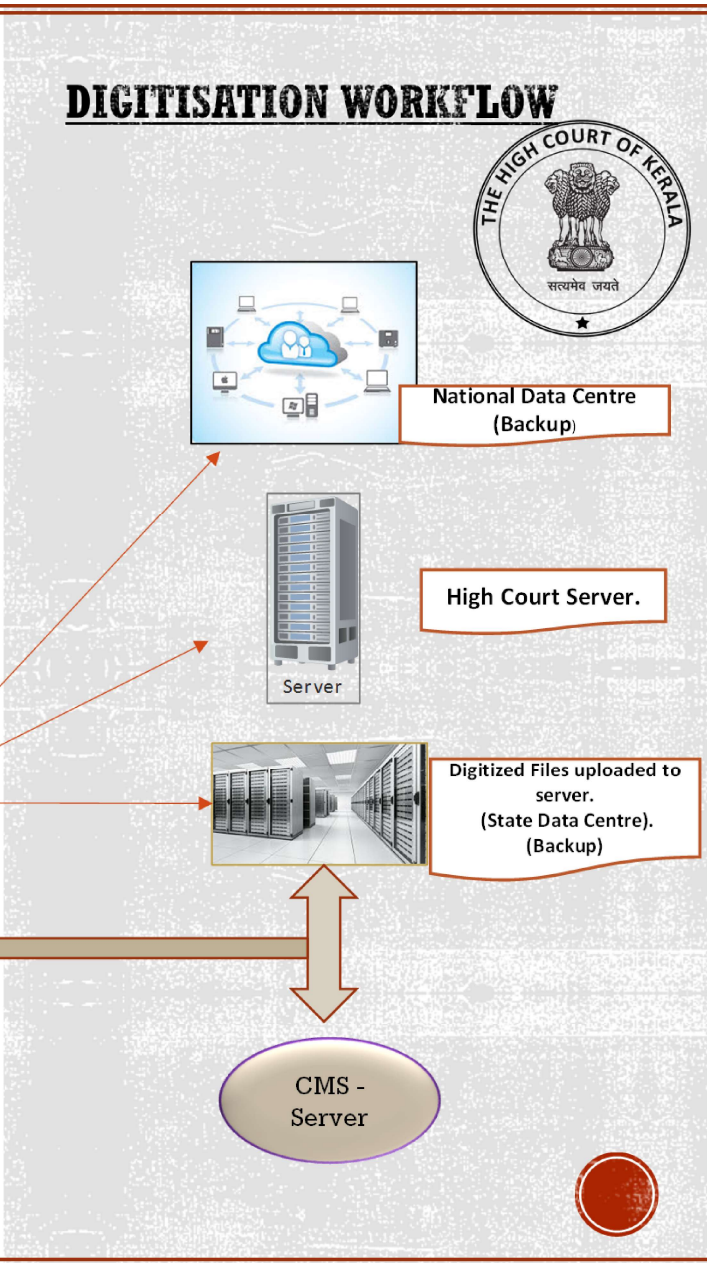
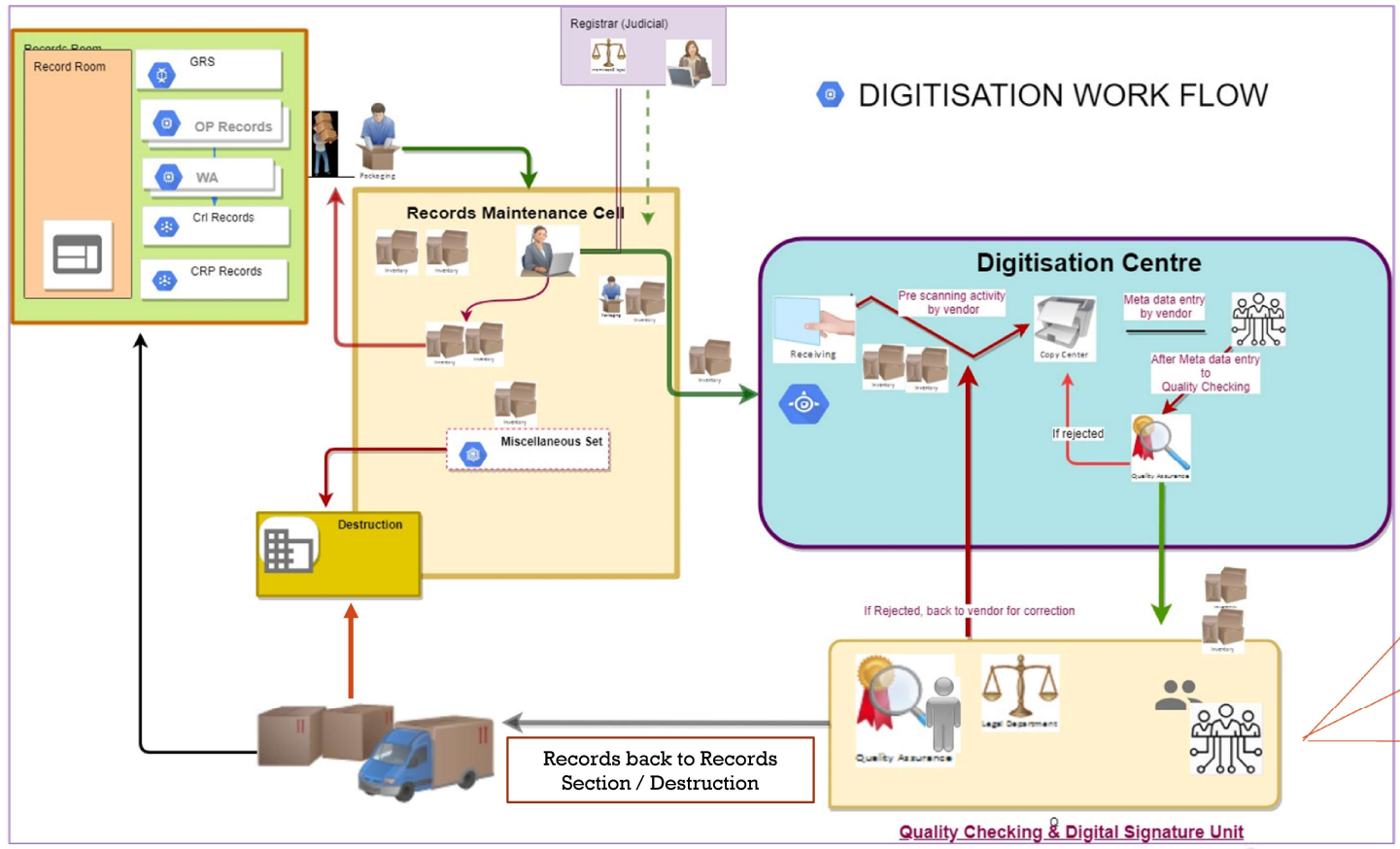
National Data Centre (Backup)

State Data Centre (Backup)

Category of officials detailed

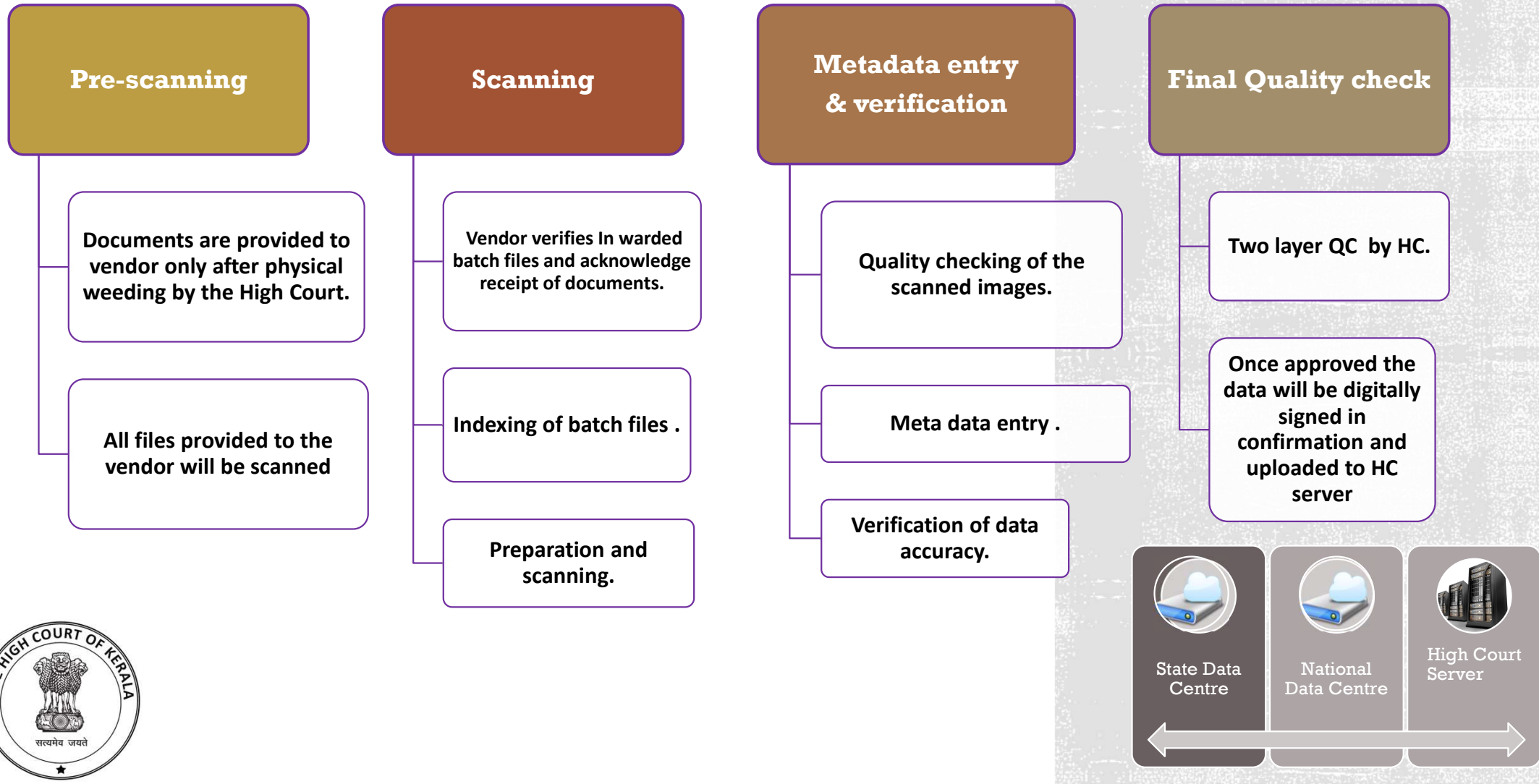
- Pre-scanning – High Court
 - Office Attendants (Rtd)
 - Computer Assistants (Rtd)
 - Digitization Officer (Rtd)
- Scanning – Service Provider
 - Service Provider
- Quality Checking– High Court
 - Inline by the Service provider.
 - Level I – by Digitization Officer.
 - Level – II – High Court officials in the rank of Assistant Registrar and above.
- Logistics – High Court
 - Office Attendants
- Resource pool is created from the members of retired High Court staff who have very good experience in the Judicial side with essential computer operating skills.





DIGITISATION PROCESS

The methodology and workflow of the project

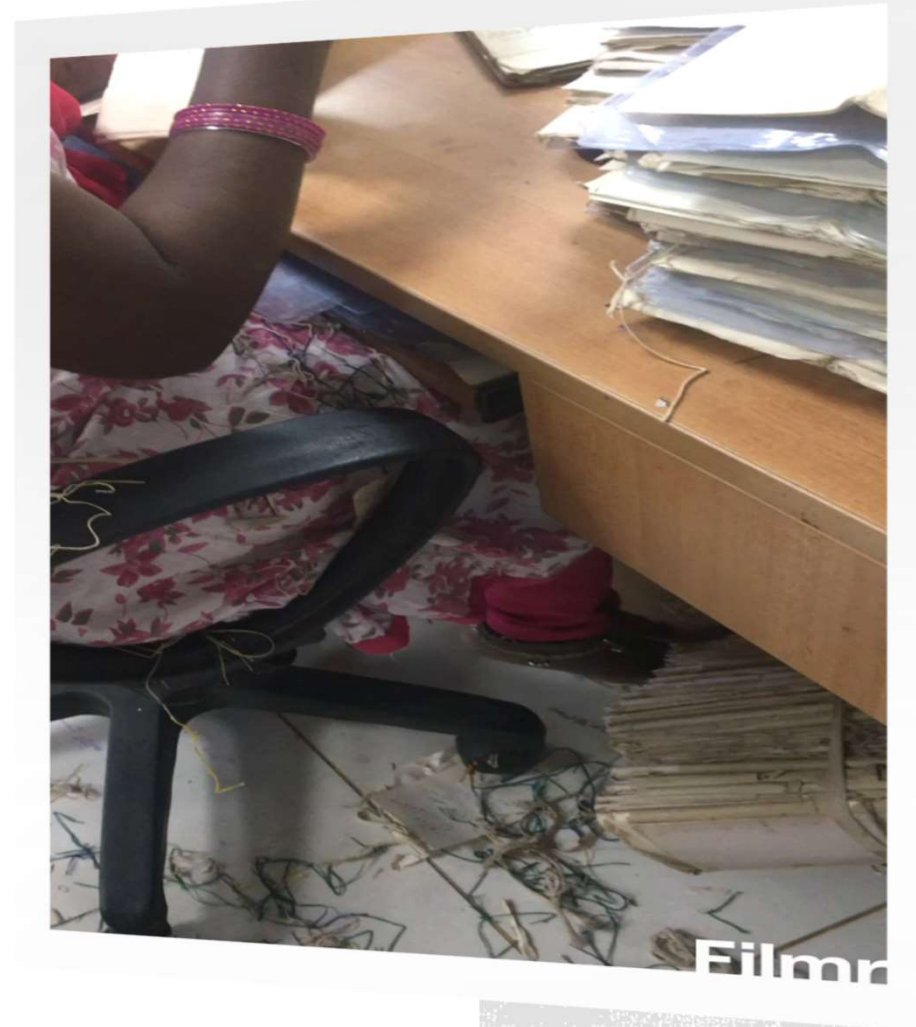


SCANNING PREPARATION

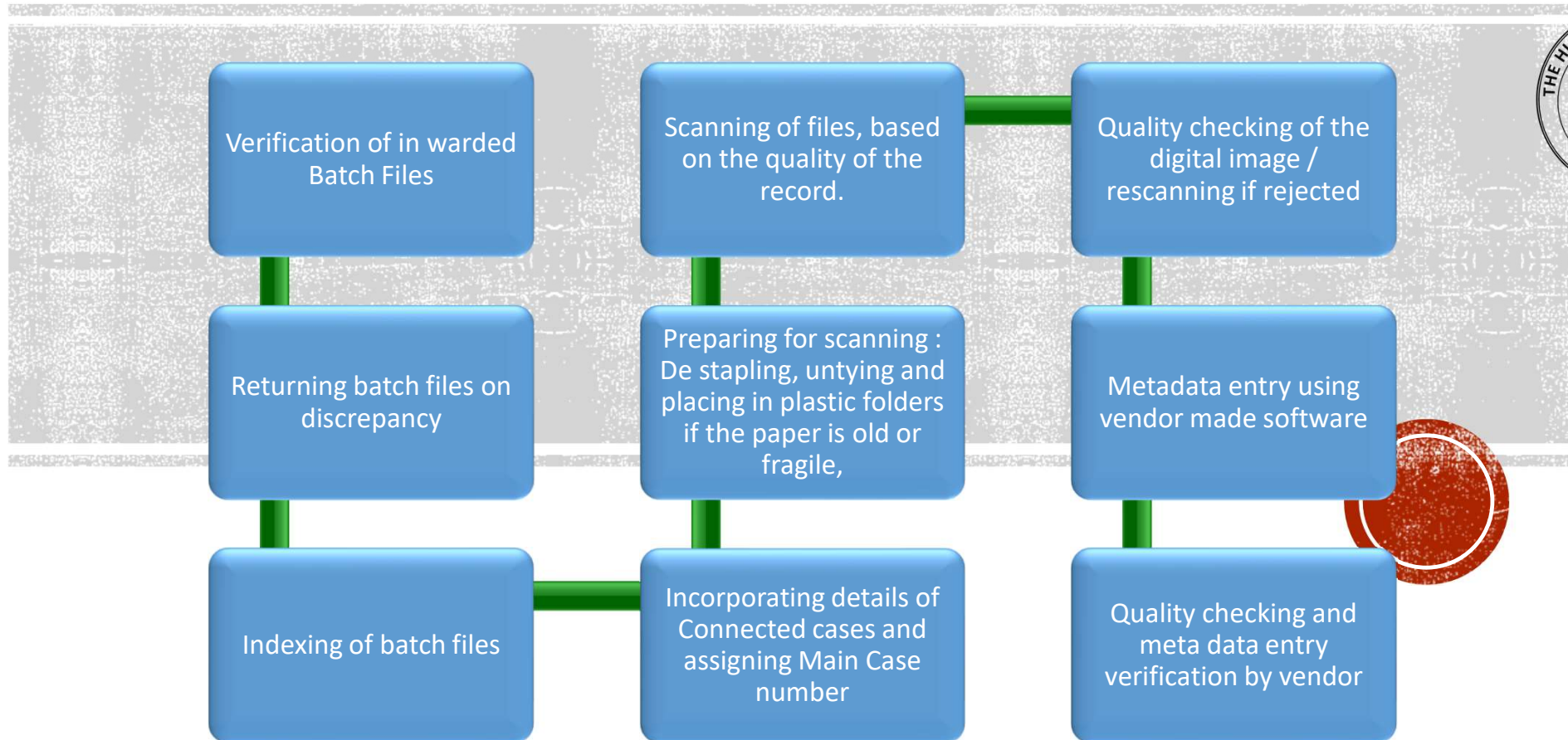


➤ *For uninterrupted scanning files will be unfolded, de stapled, de-tagged and if sheets are fragile plastic folders used.*

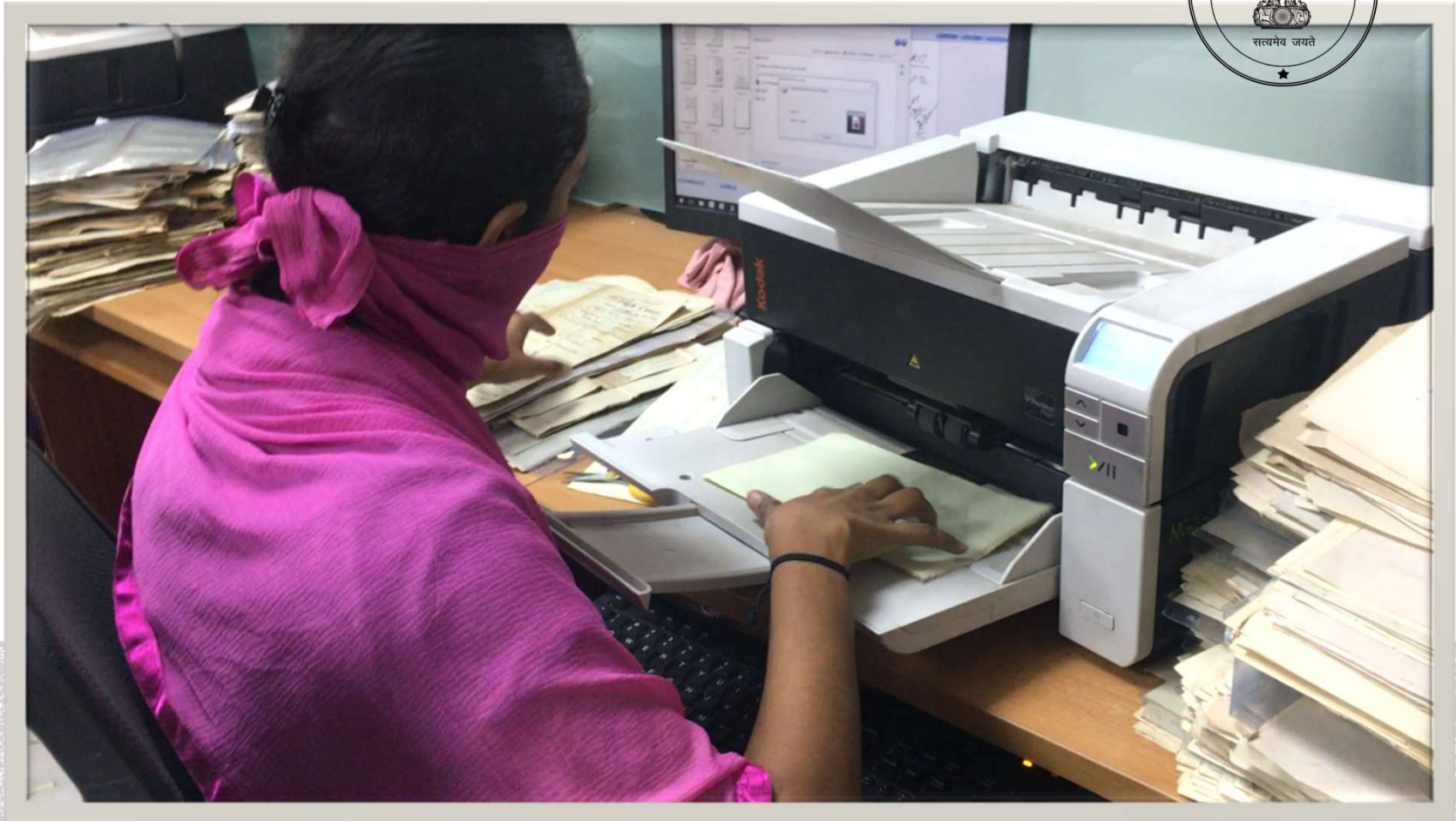
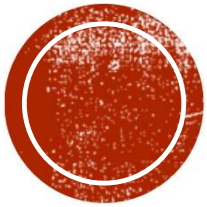
➤ *Uneven edges of the files will be trimmed and makes the files ready for scanning.*



SCANNING & DIGITISATION PROCESS – BY THE SERVICE PROVIDER



SCANNING PROCESS



➤ *Appropriate scanners are used depending on the physical condition of the papers.*

DIGITIZATION PROJECT OF DISPOSED CASES



Progress Report of Digitisation Project - 23-08-2022

Date of Commencement of Prescanning	20-05-2020
Prescanning Phase II commenced from	24-08-2021
Pilot phase commenced from	17-02-2021
User Acceptance Certificate issued on	10-09-2021

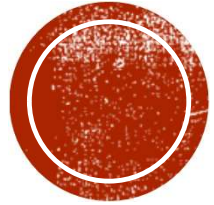
No of Files digitized **2,13,183** as on 28.08.2022
 No of Pages **1,08,79,900** as on 28.08.2022

BUFFER STOCK STATUS	Files	Papers
Pre-scanning verification completed	3,36,902	1,52,14,537
Scanning completed - NSTL	2,65,520	1,32,11,327
Buffer stock	71,382	20,03,210

Scanning / Inspection Status	Files	Pages	Pendency '@		
			Level	Files	Pages
Submitted for approval by NSTL	2,65,520	1,32,11,327			
Level -I QC approval	2,14,688	1,09,49,519	L1	50,832	22,61,808
Final QC - approval	2,13,183	1,08,79,900	L2	1,505	69,619

Deployment of workforce	Prescanning		Post Scanning - LI		Post Scanning - LII	
	Sanctined Strength	Deployed	Sanctined Strength2	Deployed2	Sanctined Strength3	Deployed3
Digitization/Facilitating Officers	9	8	7	6	2	2
Computer Assistants	2	1	0	0		
Office Attendants	5	5	5	4		





DIGITIZATION PROJECT OF PENDING FILES





- Implemented as part of **'Paperless Courts Project'** initially in bail jurisdiction and tax and related matters, on pilot basis.
- Project commenced on 19.05.2022.
- Data entry operators deployed in the Sections concerned are detailed for digitizing the pending case files.
- Pre scanning verifications to be performed by the officials in the Section.
- Post scanning : Data entry operator does the necessary meta data entry and uploads the case file in parts, into the e-filing portal and submits the same to the dashboard of Section officer concerned for verification.
- Once the section officer verifies the file and affixes digital signature in confirmation, the digitized case file becomes integrated with the CMS (Case Management System).





BAIL Jurisdiction:

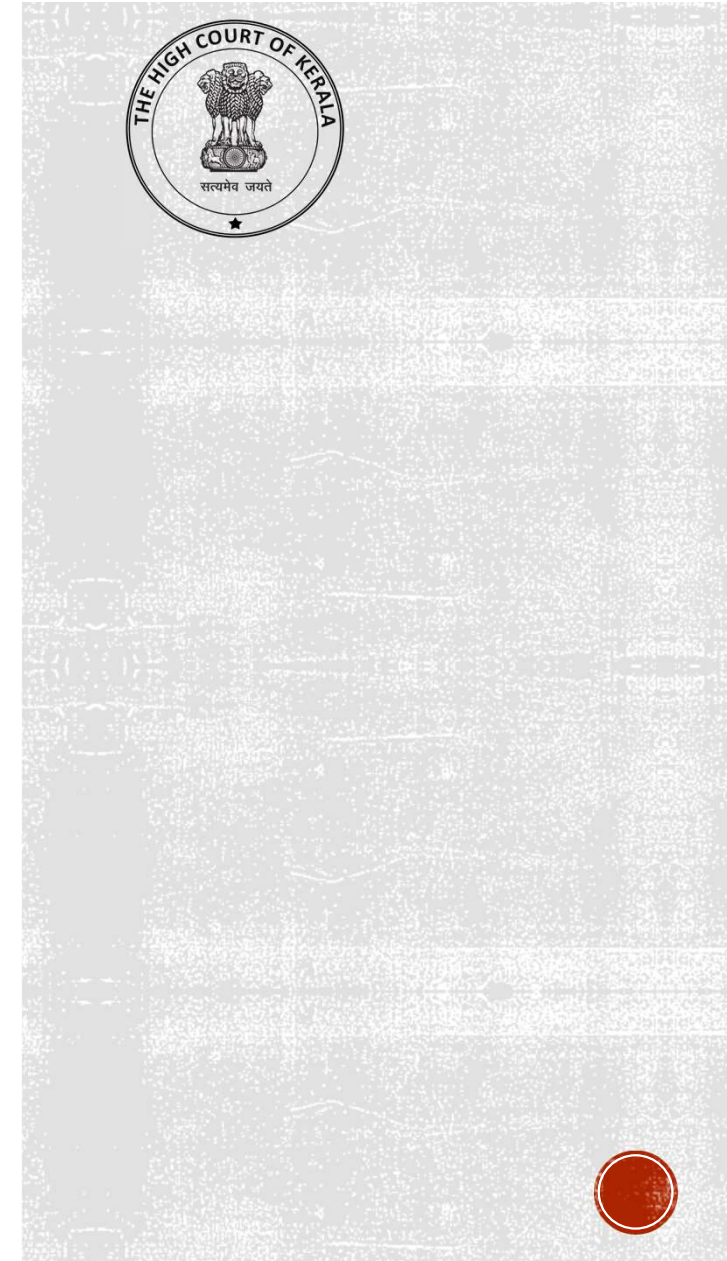
- Bail Applications

TAX and related matters:

- Central Excise Appeals
- Customs Appeals
- Income Tax Appeals
- Income Tax References
- OP(Tax)[*u/a 227*]
- Other Tax Appeals
- Other Tax Revision Cases
- Sales Tax Revisions



- **PENDENCY (PHYSICALLY FILED) as on 24.06.2022:**
 - BAIL APPLICATIONS: 755
 - TAX JURISDICTIONS: 837
- **SCANNED FILES:**
 - BAIL APPLICATIONS: 682
 - TAX JURISDICTIONS: 277
- **UPLOADED FILES:**
 - BAIL APPLICATIONS: 644
 - TAX JURISDICTIONS: 223
- **FILES VERIFIED BY SO (STARTED ON 22.06.2022):**
 - BAIL APPLICATIONS: 40
 - TAX JURISDICTIONS: 0



Progress Report of Digitization of Cases under Consideration -

24-06-2022

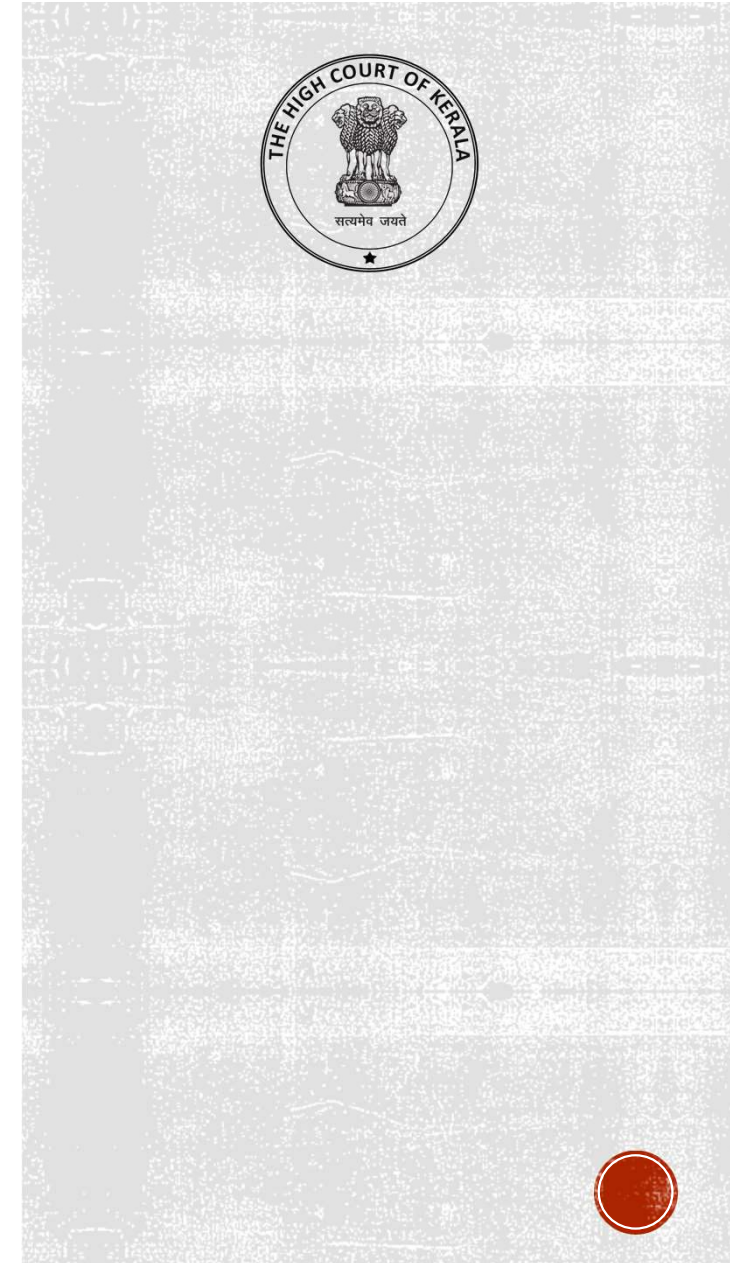


Date of Commencement	19-05-2022	Files Digitized			Digitization Pendency		
Section	Pendency	Scanned	Uploaded	Verified by SO	For scanning	For Upload	For SO Verfn.
Bail (only BA casetype)	755	682	644	40	73	111	715
DTC (only tax matters)	837	277	223	0	560	614	837
Total	1592	959	867	40	633	725	1552
Scanning status - Pages				Upload status - Pages			
Bail		19,279		Bail		17,928	
DTC		29,178		DTC		24,292	
Total pages scanned		48,457		Total pages uploaded		42,220	
Pending Upload after Scanning		Files		Pages			
		92		6,237			
Section and Case Types		Scanned		Uploaded		Verified by SO	
Bail Section	Pendency	Files	Pages	Files	Pages	Files	Pages
Bail Applications	755	682	19,279	644	17,928	40	2256
Total	1863	682	19,279	644	17,928		
DTC Section (only tax matters)	Pendency	Files	Pages	Files	Pages	Files	Pages
Central Excise Appeals	24	4	306	4	306	0	0
Customs Appeals	52	10	310	6	189	0	0
Income Tax Appeals	209	192	23,690	156	19,958	0	0
Income Tax References	0	1	214	1	214	0	0
O.P.(TAX)[u/a 227]	23	16	867	14	751	0	0
Other Tax Appeals	11	1	124	0	0	0	0
Other Tax Revision Cases	467	15	751	13	612	0	0
Sales Tax Revisions	51	38	2,916	29	2,262	0	0
Total	837	277	29,178	223	24,292	0	0



IMAGE OUTPUT

- ✓ Depending on the usability, the digitized information can be saved in different formats like
 - ✓ TIFF – TAGGED IMAGE FILE FORMAT
 - ✓ PDF – PORTABLE DOCUMENT FORMAT
 - ✓ PDF/A – ISO STANDARDISED VERSION OF PDF USED FOR ARCHIVING
 - ✓ JPEG,- JOINT PHOTOGRAPHIC EXPERTS GROUP, etc.



Types of Scanners

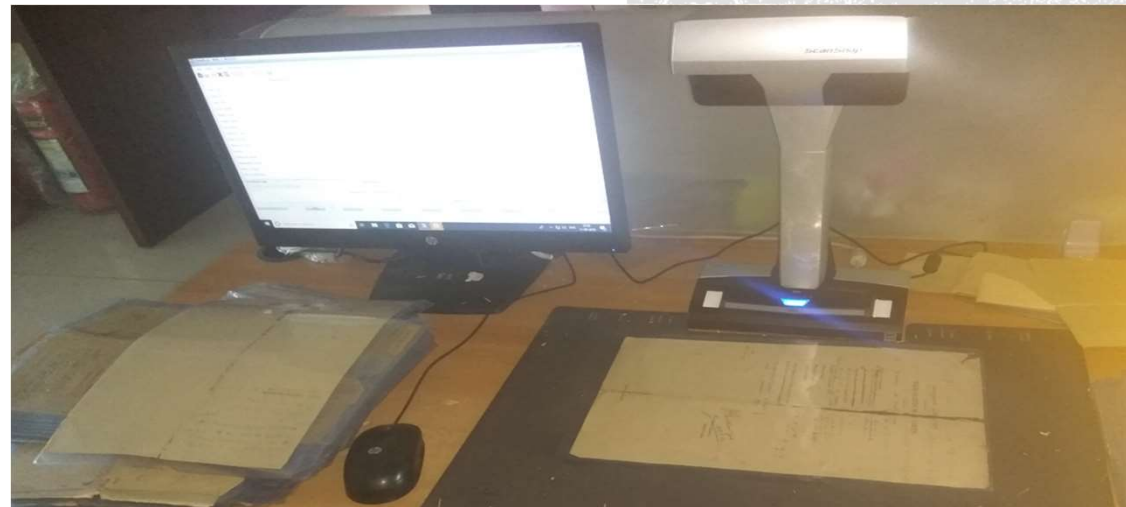
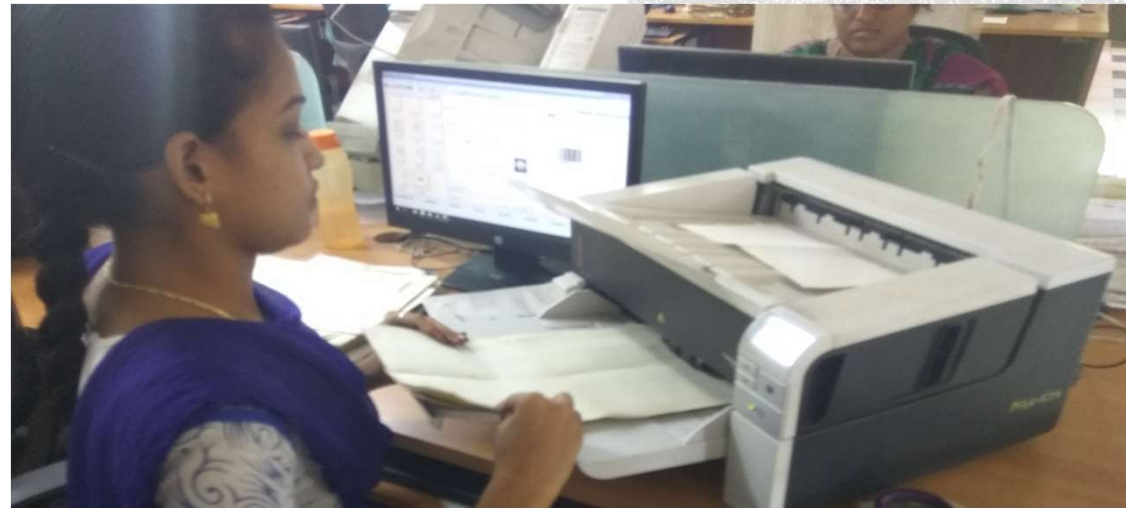
- ADF scanners
- Flatbed
- Overhead scanner

Mode of Scanning

- B & W
- Grayscale
- Colour

Specs of Scanniing

- DPI – Dots per Inch



TEXT SEARCHABLE IMAGE

- **OCR/ICR**
 - **OCR – optical character recognition**
 - **ICR – intelligent character recognition**
- **OCR** software translates scanned images of text, **whether printed or typewritten**, and turns these scans into machine-encoded text. E.g. FreeOCR, ReadIris, Adobe Acrobat Pro DC
- An **ICR** is a system that learns different fonts and styles of **handwriting**. With an ICR, a computer can study handwriting and can learn to recognize it to improve accuracy and recognition. Essentially, it is a smarter application of OCR that is more involved and more detailed. E.g. FormXtra.AI, Abbyy finereader, OmniPage etc.





DIGITAL SIGN

- A digital signature is an electronic, encrypted, stamp of authentication on digital information such as email messages, macros, or electronic documents.
- Digital signatures use a standard, accepted format, called Public Key Infrastructure (PKI), to provide the highest levels of security and universal acceptance.
- If the document changes after signing, the digital signature is invalidated.

Signed By :JOISY PAUL
Signed On :2022.06.02 14:41:16 IST



IMAGE REPOSITORY



- The central place in which aggregation of data is kept and maintained in an organized way.
- The repository currently used in KHC is D'Space for digitized disposed files, which is customized software from open-source applications.
- Benefits
 - Improved Access
 - Better Security
 - Streamlined Management
 - Greater Visibility
 - Increased Productivity
 - Faster Reactivity





High Court of Kerala



[Home](#)

Sign on to: ▼



High Court of Kerala

The High court of Kerala is the highest court in the Indian state of Kerala and in the Union Territory of Lakshadweep. It is located in the Kochi. The High Court is empowered with original, appellate and revisional jurisdiction in civil as well as criminal matters and the power to answer references to it under some

Log In to Case Repository ?

[New user? Click here to register.](#)

Please enter your e-mail address and password into the form below.

E-mail Address:

Password:

Log In

Public User



SEARCH FIELDS – PREDEFINED (DMS)

[Home](#)

Logged in as [admin@dspace.com](#)

Search Case Records By

[Case Type/No /Year](#)

[Petitioner/Respondent](#)

[Judgement Date](#)

[Judge Name](#)

[Free Text Search](#)

[Saved Search](#)

[Advance Search](#)

Search Admin Records By

[File Number / Index Number](#)

High Court of Kerala Case Repository

Case Status:

Select

Court Type:

Select

Case Type:

Case Number:

Case Year:

Go





ADVANCED SEARCH(DMS)

Judgement Date

Judge Name

Free Text Search

Saved Search

Advance Search

Search Admin Records By

File Number / Index Number

Submission Control

Batch Import

Search:

for

Current filters:

Add filters:

Use filters to refine the search results

Results/Page | Sort by In order





FREE-TEXT SEARCH(DMS)

Search Case Records By

- Case Type/No./Year
- Petitioner/Respondent
- Judgement Date
- Judge Name
- Free Text Search
- Saved Search
- Advance Search

Search Admin Records By

- File Number / Index Number

Submission Control

- Batch Import

High Court of Kerala Case Repository

Community * Collection * Enter Any Text: Synonym

Results/Page | Sort by In order

Results 1-10 of 199 (Search time: 0.241 seconds).

Item hits:

Case Type	Case Number	Case Year	Judgement Date	Judge Name	First Petitioner	Master Case
WP(C)	8667	2010	07-06-2010	HONOURABLE MR.JUSTICE S.SIRI JAGAN	ANTONY	-
WP(C)	17994	2010	02-07-2014	HONOURABLE MR. JUSTICE A.V RAMAKRISHNA PII I AI	RUKHIYA	-

ne here to search





OUTPUT OF FTS (FREE TEXT SEARCH)

2nd respondent. She died in a **Motor Vehicle** accident on 3.6.2007. The deceased, being a member of the welfare fund, was covered by the Group Personal Accident Insurance Policy with the 3rd Respondent.

2. The petitioner submitted application for compensation to the 1st respondent who forwarded the same with all necessary documents to the 2nd respondent Fishermen's Welfare Fund Board. The Board, in turn sent the application with all necessary documents to the 3rd respondent Insurance Department, with specific recommendation to pay a compensation of Rs.1,00,000/-. But the 3rd Respondent refused to entertain the claim on the





ACCESSING DMS FROM CIS

- The image repository (DMS) will be accessed from CIS using application program interface (API).
- Link is placed in CIS from which the user with access rights can log into DMS for viewing, downloading, and printing the documents.

