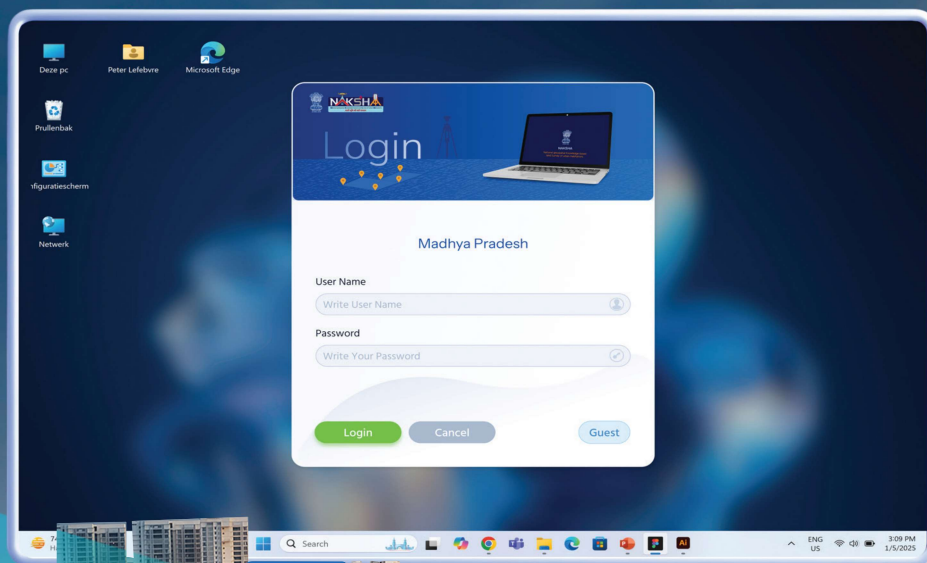




सत्यमेव जयते
Department of Land Resources,
Ministry of Rural Development



User Manual of NAKSHA Desktop Application



Designed and Developed by



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1. Overview

The Madhya Pradesh State Electronics Development Corporation (MPSEDC) has been entrusted with the development of the NAKSHA Project as its technology partner. Launched by the Department of Land Resources (DoLR), NAKSHA is an initiative to modernize urban land records in 152 cities across India. By integrating existing land records with new survey data through advanced geospatial technologies like aerial and satellite mapping, the project aims to improve urban governance, streamline property ownership records, and reduce land disputes. Additionally, NAKSHA supports better infrastructure planning, fair property taxation, and transparent land management, ensuring real-time data access and seamless integration with state land records while maintaining secure, role-based access for different stakeholders.

2. About Desktop Application

The NAKSHA Desktop Application is a tool designed for survey agencies like Survey of India and drone operators to upload, validate, and manage geospatial survey data. It supports the secure upload of Orthorectified Image (ORI) in .tpk format and feature-extracted map files in .gdb format, ensuring that all survey data meets predefined geometry and schema validation standards before integration into the system. The application facilitates seamless data synchronization with the NAKSHA WebGIS Portal, allowing real-time updates and accurate mapping. Access to the application is restricted through role-based authentication, ensuring that only authorized users can upload and manage survey data. Additionally, it includes error reporting and logging mechanisms to track upload issues, providing a transparent record of all processed files. This desktop utility plays a crucial role in ensuring that high-quality, validated geospatial data is efficiently integrated into the NAKSHA system, supporting urban land management and decision-making.

3. Access Desktop Application:

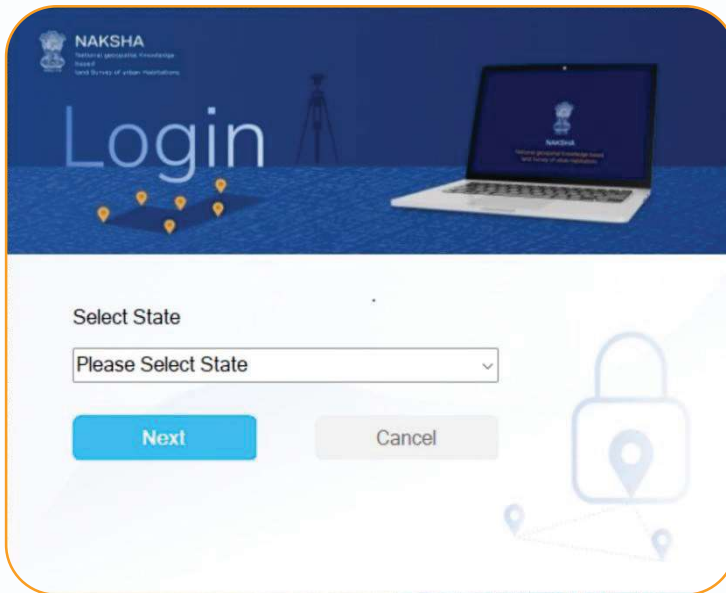
Step 1: Launch the Application

- Locate the NAKSHA Desktop Application icon on your desktop or search for "NAKSHA" in the Start Menu.
- Double-click the icon to open the application

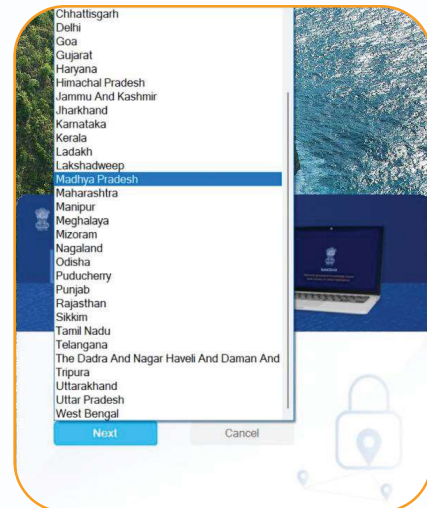
4. Login Page

Step 2: Select State

- On application startup, select the state from dropdown.
- After selecting state click on the Next button to proceed further to login screen.



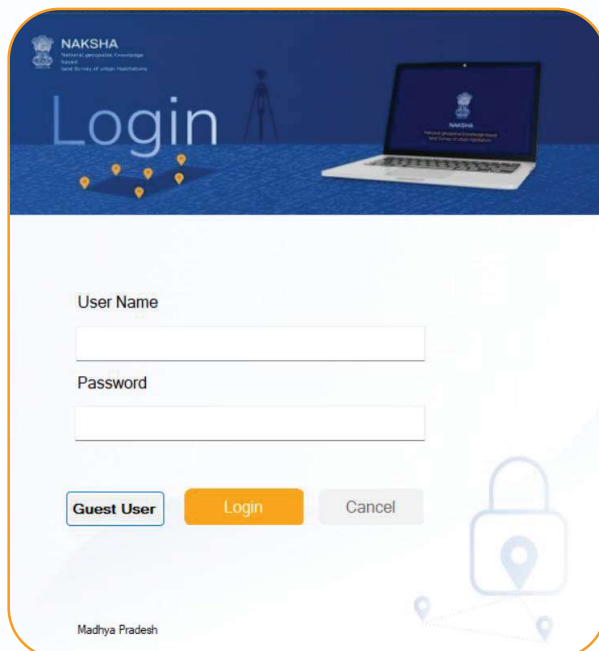
The screenshot shows the NAKSHA Login page. At the top, there is a header with the NAKSHA logo and the text 'National Geographic Knowledge Portal - Survey of Urban Institutions'. Below the header, the word 'Login' is displayed in large blue letters. Underneath, there is a section titled 'Select State' with a dropdown menu that says 'Please Select State'. To the right of the dropdown is a blue 'Next' button and a grey 'Cancel' button. A faint map of India is visible in the background.



This screenshot shows the state selection dropdown menu. The list of states is as follows:

- Chhattisgarh
- Delhi
- Goa
- Gujarat
- Haryana
- Himachal Pradesh
- Jammu And Kashmir
- Jharkhand
- Karnataka
- Kerala
- Ladakh
- Lakshadweep
- Madhya Pradesh
- Maharashtra
- Manipur
- Meghalaya
- Mizoram
- Nagaland
- Odisha
- Puducherry
- Punjab
- Rajasthan
- Sikkim
- Tamil Nadu
- Telangana
- The Dadra And Nagar Haveli And Daman And
- Tripora
- Uttarakhand
- Uttar Pradesh
- West Bengal

Below the list are 'Next' and 'Cancel' buttons.



The screenshot shows the NAKSHA Login page with the 'Guest User' option selected. The 'User Name' and 'Password' fields are visible. Below the fields are three buttons: 'Guest User' (highlighted in blue), 'Login' (orange), and 'Cancel' (grey). At the bottom left, the text 'Madhya Pradesh' is displayed. A faint map of India is visible in the background.

Step 3: Guest Login

- Click on the Guest Login button to access the modules.
- In this module the user can validate both files without login.
- The upload file mechanism is restricted for the guest users.

Step 4: Login to Your Account

- On the login screen, enter your username and password.
- Click "Login" to proceed.

Verify Access & Connectivity

- Ensure your system is connected to the internet for real-time data synchronization.
- If the application requires server authentication, allow a few moments for it to validate your credentials.

Step 5: Navigate to File Upload Section

- Click on the Sector ID of the case you need to process.
- The system will redirect you to the next page, where you will see menu options for:
 - Upload GDB File
 - Upload TPK File

5. Validate & Upload Feature Extraction/Plot Data File's

Step 6: validate & Upload GDB File

- Click on "Upload GDB File" from the menu.
- Select the District, ULB, Ward, and Survey Unit from the dropdown lists.
 - The dropdown will only display jurisdiction assigned to the user.
- Fill in the required form fields.
- Click "Choose File", select the GDB file from your system, and click "Open".
- Click "Validate File" to check for errors.
 - If the file fails validation: Errors will be highlighted, and corrections must be made before proceeding.
 - If the file passes validation: The system will return a success message.
 - Users can download the validation report after the file has been validated.
- Once the file is successfully validated, click "Upload File" to complete the process.
- The system will display the upload status and generate an alert once the upload is successful.

The screenshot shows the NAKSHA Desktop Application interface. On the left is a blue sidebar with buttons for 'Upload GDB' and 'Upload TPK'. The main area has a title bar 'Upload Feature Extracted/Plot Data File's'. Below the title bar are four dropdown menus: 'District' (set to 'Indore'), 'ULB' (set to 'Please Select ULB'), 'Ward' (empty), and 'Survey Unit' (set to 'label5'). Below these is a 'File' section with a 'Choose a GDB File' button. To the right of the file section are 'Validate' and 'Upload' buttons. At the bottom of the form area is a 'Download Validation Report' button. A red 'Close' button is located at the bottom right of the application window.

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Upload Feature Extracted/Plot Data File's

District : Indore ULB : Indore - 250901

Ward : 54 - Residency ward Survey Unit : Survey Unit 1
226821

File : Choose a .GBD File
C:\Users\dikah\Downloads\Indore\226821.zip

Validate **Upload**

Validation Started....
Extracting zip file to ...C:\Users\dikah\Downloads\Indore\226821.zip\Extracted\115023...
Validating file name... Done!
Validating GDB File... Done!
Validating PROPERTY_PARCEL Layer...
Checking Layer Projection...Found WKID: 32644-- Done!-- Done!
Validating Fields... Done!
Checking data in GDB file...
Validating duplicate values-- Done!
Validating Village Code-- Done!
Validating Start Plot Number-- Done!
Validating Mandatory data-- Done!
Checking special char in Plot Data... Done!-- Done!
Checking Duplicate plot numbers Done!
File Found VALID.

Download Validation Report **Close**

6. Validate & Upload Drone Orthorectified Image (ORI) (.tpk) file

Step 7: Validate & Upload TPK File

- Click on "Upload ORI File" from the menu.
- Select the District, ULB, Ward, and Survey Unit from the dropdown lists.
 - The dropdown will only display the jurisdiction assigned to the user.
- Fill in the required form fields.
- Click "Choose File", select the TPK file from your system, and click "Open".
- Click "Validate File" to check for errors.
 - If the file fails validation: Errors will be highlighted, and corrections must be made before proceeding.
 - If the file passes validation: The system will return a success message.
 - Users can download the validation report after the file has been validated.
- Once the file is successfully validated, click "Upload File" to complete the process.
- The system will display the upload status and generate an alert once the upload is successful.

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Upload GDB
Upload TPK

Upload Drone ORI (.TPK) file

District : Indore ULB : Indore - 250901
Ward : 54 - Residency ward Survey Unit : Survey Unit 1
File : Choose a .TPK File
C:\Users\diksh\Downloads\Indore\226821.tpk

Validate Upload

Validating file...
Checking Layer Projection...
WGS_1984_UTM_Zone_43N
32643
Extent: XMin=588468.592838415, YMin=2509944.35111706, XMax=592633.142834182, YMax=2513002.94

Download Validation Report Close

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Upload GDB
Upload TPK

Upload Drone ORI (.TPK) file

District : Indore ULB : Please Select ULB
Ward : Survey Unit :
File : Choose a .TPK File

Validate Upload

Download Validation Report Close

-End of Document--