



MINISTRY OF LABOUR & EMPLOYMENT

HEALTH INSURANCE SCHEME
FOR IDENTIFIED BENEFICIARIES IN UNORGANISED
SECTOR

District Key Management Authority

User Manual

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Introduction

Rashtriya Swasthya Bima Yojna

RSBY was launched by the Ministry of Labour and Employment, Government of India, to provide health insurance coverage for Identified Beneficiaries in Identified sector. To provide cash less health insurance cover to person below poverty line Ministry of Labour and Employment, Government of India has initiated the project of issuance of Smart Card based Rashtriya Swasthya Bima Yojna. Families enrolled in gets a smart card containing their fingerprints and photographs. This enables them to receive inpatient medical care of up to 30,000 per family per year in any of the empanelled hospitals. Pre-existing illnesses are covered from day one, for head of household, spouse and up to three dependent children or parents.

Key Management System

Security Framework to establish following

- Enabling the user organization to authenticate the identity of the beneficiary through Smart Card in an offline mode.
- Enabling the user organization to authenticate the card and protect illegal card cloning.
- Protecting the card data against forging and tampering.
- Enabling the authorized representatives to modify data in order to perform field transaction.

Ministry of Labour and Employment has entrusted NIC to design and develop KMS software for the project.

KMS Process Cycle

Below given is the process flow and complete Process:

Cycle for KMS operations, after the Parent Keys are generated and are in safe custody at Ministry of Labour and Employment.

- DKMA consolidates the requirements of various cards under its jurisdiction & sends these requirements along with the details of trusted authorities, already earmarked for the purpose, to CKGA
- CKGA, after receiving request from DKMA gives a batch number to individual request.
- CKGA processes the request by starting the process of production of required master cards.
- CKGA produces the master cards & dispatches the cards to DKMA nodal officer either in person or through some secured channel.
- DKMA personalizes each Master card from the information received from the trusted agencies (FKO's) at field level as mentioned in point number (i) above in this section, and generates default PIN/Password for individual card.
- Personalized cards are then dispatched through secured channel or handed over in person to the trusted agencies of Field Key Officer.
- Field Key officer receives the cards, modifies the PIN/Password of his card, acknowledges the receipt to DKMA, and sends the detail of received cards.
- After getting satisfied from the acknowledgement, DKMA updates its database.
- FKO's in any case, must keep their PIN/Passwords safely and never disclose them to anybody. They must also change their PIN/Password every week in normal routine and earlier, if they feel it has been compromised.

The establishment of Symmetric Key Infrastructure (SKI) is the basic requirement for implementing Smart Card Security against fake duplication, illegal tempering of information

and implementing the authority environment to carry out different functionalities on Rashtriya Swasthya Bima Yojna Card data.

The Symmetric Key Infrastructure will consist of three levels of operation for generation and Management of Keys and related Cards.

Central Key Generation Authority

Central Key Generation Authority (CKGA) is the central level authority, which works as an overall custodian of the Key Management System across the country. CKGA is responsible for production of all kinds of Master cards and their distribution to respective DKMA's.

District Key Management Authority

District Key Management Authority is the district level custodian agency for Key Management System. DKMA will receive required Master cards on request, from CKGA, personalize them and distribute it to various state departments managing the RSBY project, empanelled hospitals under the RSBY project.

Why DKMA?

DKMA accounts for the below mentioned responsibilities:

- The DKMA should access and collate the request received from the district for various classes of master key cards and forward them to the CKGA nodal officer. Distribution and management of master cards is the major defined role of DKMA
- Issue MIC, MHC and MKC cards as per the database received.
- Ensure District Kiosk is setup before enrollment and issue MKC cards respectively
- Ensure MIC cards are returned once the duty is over, and Download of data from MIC cards to DKMA computer.
- Recharge various Issuance Cards, which have exhausted their issuance limit.
- UNBLOCK Pins of the Field Key officer's card whose pin has got blocked due to maximum number of retry for the correct PIN.
- Surrender Cards as and when required and personalize it & re-issue to another FKO.
- The DKM should ensure that an annual independent security audit of the physical and IT infrastructure of each Field Key Offices within its jurisdiction to the extent used for the issuance of RSBY cards, and safe keeping of the Master cards, is carried out by a technical audit team deputed by Ministry of L&E, initially and later by a responsible and reputed third party.
- In addition to the above, the DKM should also visit the respective field offices (Enrolment camp/Kiosk/Hospital) from time to time, to inspect and ensure that the

RSBY card issuance process, Hospital process, Kiosk process and the database management procedures are being strictly followed.

- The DKM should ensure that the compromised, damaged, faulty, Master card are destroyed –physically and logically- in a manner that reasonably ensures that there are no residual remains of the key that could lead to the reconstruction of the key.

The DKMA application enables the DKM to perform all these tasks.

Hardware and Software Requirements

Hardware

- One Client PC/ Laptop with 2 PC/SC smartcard readers attached.
- Connectivity between client and server.
- Finger Print Scanner as per RSBY standard(mentioned in the tender).

Software

- Windows XP Professional with service pack 3 or above on client PC with Windows 2003 Server OS on Server with SQL 2000 database with date format set as mm/dd/yyyy hh:mm:ss tt (English – United States).
- Windows 7 with SQL server 2005 database.
- .Net Framework 3.5
- Latest Drivers setup for Smart Card Readers and Fingerprint Scanners depending on whether it's a 32bit or 64bit Operating System.

Note: It will be preferred if SQL server 2005 is used for both Windows XP and 7.

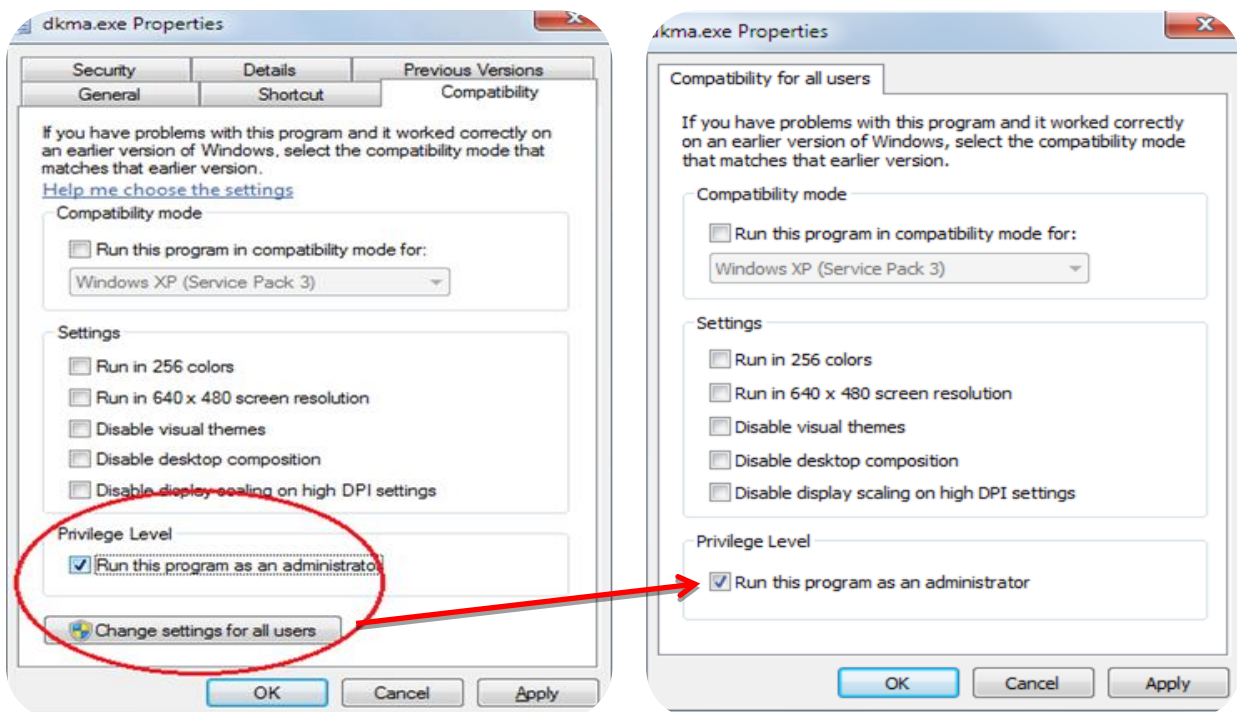
Getting Started

Pre-requisite Steps

FOR WINDOWS 7 USERS ONLY

Before starting the application there are some steps that are to be followed:

1. Once you install the application, right click on the application present on your system's desktop and click on 'Properties'.
2. In the properties window click on the '*Compatibility tab*'. Under the compatibility tab, at the bottom there is a check box for '*Privilege Level*'. Check the check box against '*Run this program as an Administrator*'



3. Click on '*Change setting for all users*', which opens a new window. Follow the same steps mentioned in '*step2*'. Click '*OK*' and proceed further and then click '*OK*', again for the window mentioned in '*step2*'.

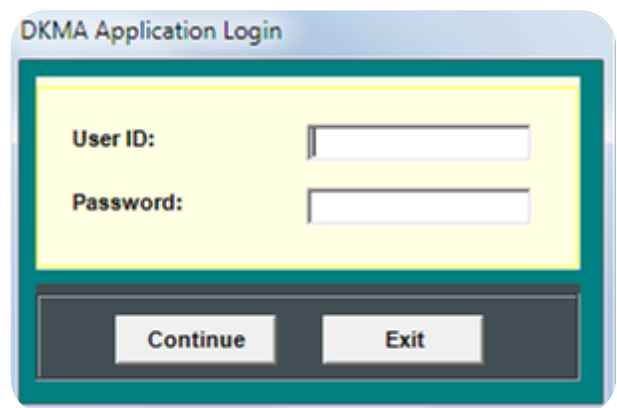
Now the application is ready to be used.

Login

Double click on the DKMA application and The window on the right appears on your Computer screen.

Enter the login id and password and click 'Continue' to connect to the database and proceed.

(It is assumed that the Database administrator has created the DKMA database).



Once you are logged into the DKMA software, a window to input the District code and District appears. You may feed details accordingly in every district. These details can be changed or modified later on.

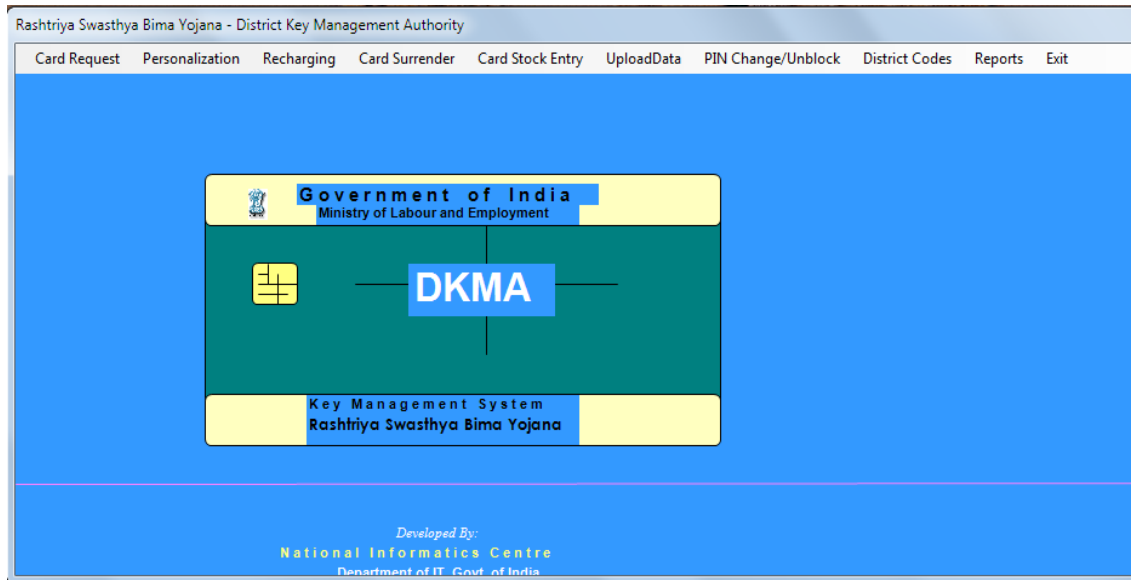
A series of actions that are done sequentially are:

1. Card Stock Entry, wherein you can feed details of every card that has been received from CKGA, as requested.
2. Issuance of cards MIC, MHC or MKC through the Card Request, and in case of more than one card is to be created then it can be done with the Additional Card Request.
3. Personalization is done after the card request process has been saved and completed; the DKMA software reads the authority ID and reference number and personalizes cards corresponding to it.
4. Cards are then sent to the field; once they reach their limit, cards need to be recharged. These cards brought at the DKMA centre and data is downloaded to the system and the card is then recharged with new set of fields and limit and ready to use again.
5. Cards are Surrendered, if in any case the Key Officers have finished their issuance, and no further issuance is to be done, in that case card is surrendered back to DKMA and all the details in the card is removed, after successful downloading of files from the card to the system, if any.

The details of each and every menu option are now discussed separately further in this document.

Menu

Once you login into the DKMA application the window shown below appears on the screen:



As you login into the DKMA application the window shown above appears.

The application shows a list of Menu options on the top of the window, such as:

- Card Request
 - New Request
 - Additional Request
- Personalization
- Recharging
- Upload FKO database
- Card Surrender
- Card Stock Entry
- UploadData
- PIN Change/Unblock
 - DKMA
 - PIN Change
 - FKO Cards
 - PIN Change
 - PIN Unblock
- District Codes
- Reports
 - FKO Personalization Report
 - FKO Card Issue and Surrender
 - FKO Card Stock Balance
- Exit

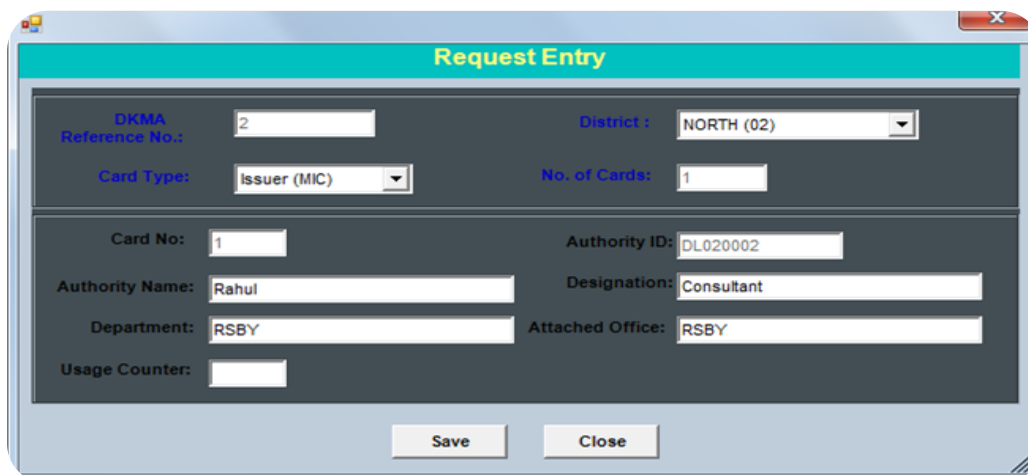
When the application is run for the first time, then the user will be prompted to enter a two character State code and a district code, this is a one time job.

Card Request

It is a data entry form for registering new requests. Every time a new card entry is requested it is done through the Card Request.

New Request

It is a submenu under the main menu Card request. When you click New Request it opens a New Request Entry form shown below, for registration of new card request.



Request for only one card can be made using this form as this is the enrolment process. Subsequent request for multiple cards is made through the option 'Additional Request', which the user can place, requests for more than one FKO cards.

To proceed further, for a card request entry, follow the steps mentioned below:

- DKMA Reference number is generated by the system.
- Select card type from the drop down list (Issuer, Kiosk , Hospital or Sp. Hospital card)
- Select district from the drop down list.
- No. of cards by default is '1' and it cannot be changed.
- Card No. is also fixed since the number of cards is 1.
- Authority ID will be generated by the system and all the other character related fields such as: are to be filled with a maximum limit of 25 characters
 - Authority Name
 - Designation.
 - Department
 - Attached Office

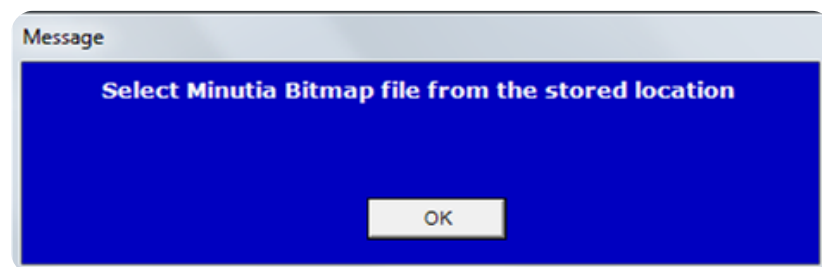
All these fields have a maximum limit of 25 characters.

- Enter Usage Counter in case of Kiosk card only, for all other cards Issuer card, the counter will be 200 or 300 fixed.

After you have entered all the details verify them and then, click on the save button to save the entries. Once you click on save a window appears, shown below:



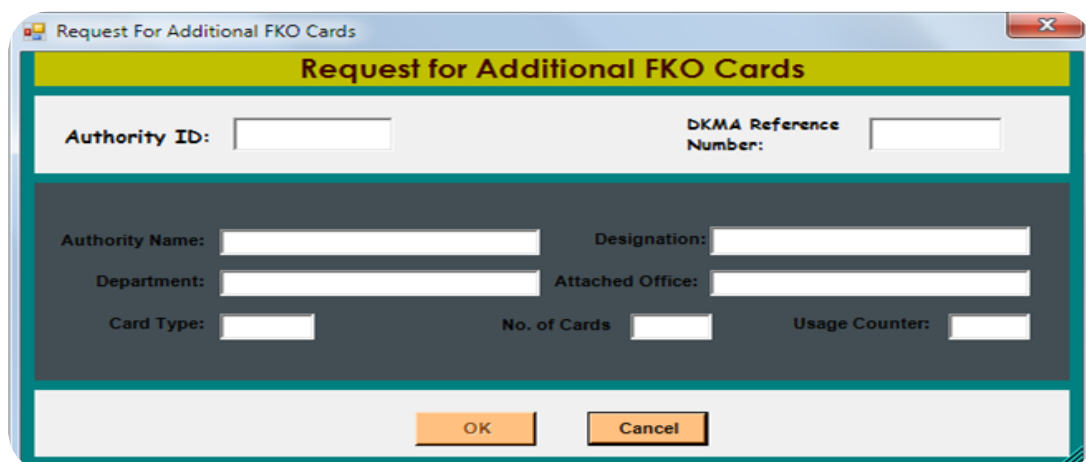
As you place the finger on the figure print capturing device, and click on OK then a window appears asking you to select a Minutia Bitmap file from the stored location.



A confirmation message will be shown that the data is saved.

Note: Take note of the DKMA Reference number for future use.

Additional Request

A screenshot of a Windows-style dialog box titled "Request For Additional FKO Cards". The title bar is light blue with a yellow title bar below it that says "Request for Additional FKO Cards". The main area has a light gray background. It contains several input fields: "Authority ID:" and "DKMA Reference Number:" at the top; "Authority Name:" and "Designation:" below them; "Department:" and "Attached Office:" below those; and "Card Type:", "No. of Cards", and "Usage Counter:" at the bottom. At the very bottom are two buttons: "OK" and "Cancel".

As shown above, this window will appear if you click on the Additional card request submenu under the Card request Menu. Additional card allows you to personalise one or more number of cards.

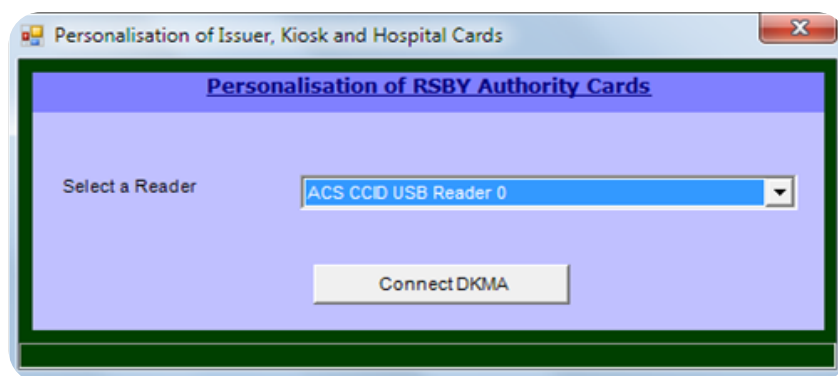
Please follow the below mentioned steps for creating additional cards:

- Enter the Authority ID as generated by the system in the New Request menu, while creating the card for the first time.
- Once you enter the Authority ID, all the other details such as the authority name, designation, attached office and card type will be displayed in the specified fields.
- DKMA reference will be generated by the system at the time of creation.
- Enter the no. of cards requested for creation
- Usage Counter is fixed for MIC cards, in case of Kiosk Cards the maximum limit can be entered.

On clicking OK, once you have entered all the details correctly, a confirmation message will appear showing the data is successfully saved.

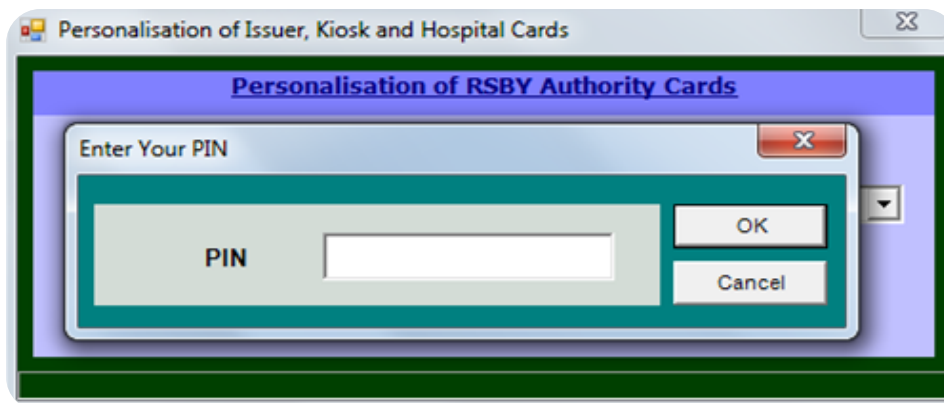
Personalisation

This menu allows us to personalise MIC, MHC and MKC cards received from CKGA. Personalisation will be done on the basis of the DKMA reference number that is generated by the system at the time of card request entry. One or more number of cards can be personalised, one at a time.

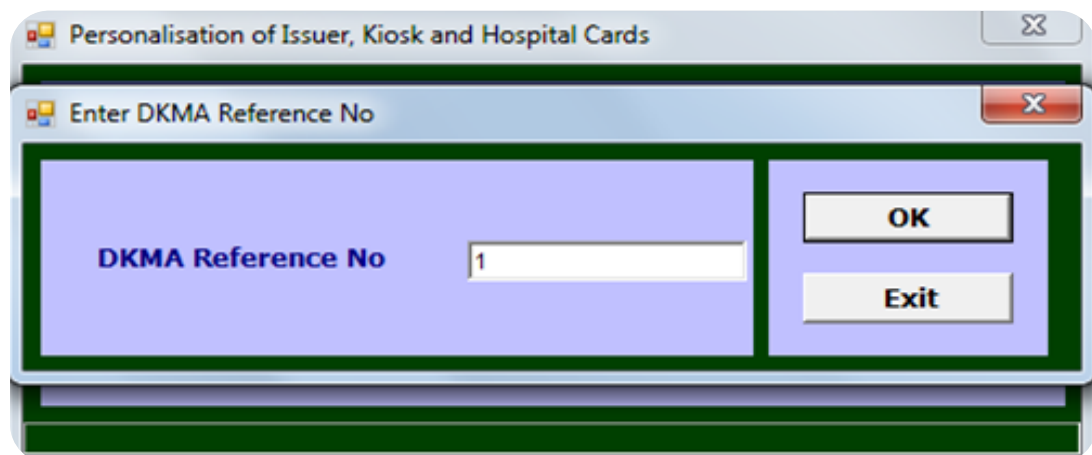


To start the personalisation procedure, click on the personalisation menu. The window as shown above appears on the screen.

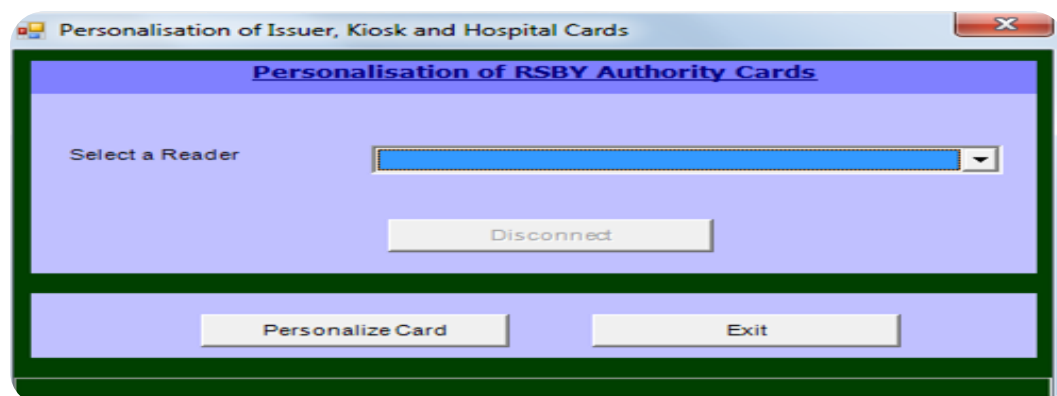
- Before personalisation, connect the card readers to your computer system.
- Once, you are through it, insert the DKMA card in one of the card readers and select a reader from the drop down menu as shown in the fig.
- When you click on 'Connect DKMA' a prompt appears (shown below) on screen asking for the pin of the DKMA card.



- Enter the DKMA pin and click on OK. On successful verification a window appears to input the DKMA reference number. DKMA reference number is the number against which the type of card is personalised.



- Click on OK and the window shown below appears for the personalisation of card.



- Select a reader for inserting the MIC, MKC, and MHC as required. Insert the card and then, click on 'Personalize card'. Insert cards one by one, when prompted, if there is more number of cards to be personalized.

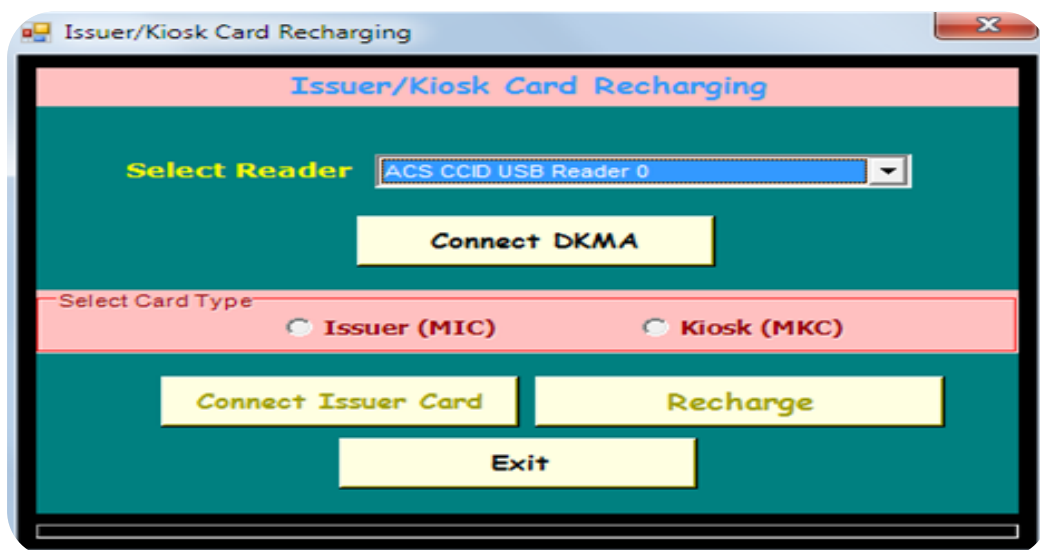
NOTE: All the details of the cards received from CKGA should be entered by Card stock entry module before personalization. All the cards once personalised should not

be re-personalised until and unless the card is surrendered. Cards should be personalized with a default pin.

Recharging

Cards once issued, are then used for field officers for issuance and at district kiosk. These cards have a certain limit. A MIC card has around 200 issuance limit, after which further issuing of cards is not possible. Once, the limit is reached these cards are brought to the DKMA.

Once the Limit is reached the. The FKO is required to do bring these cards to the DKMA and the time of recharging he/she has to input the FKO card PIN. The DKMA card is also required to do this.

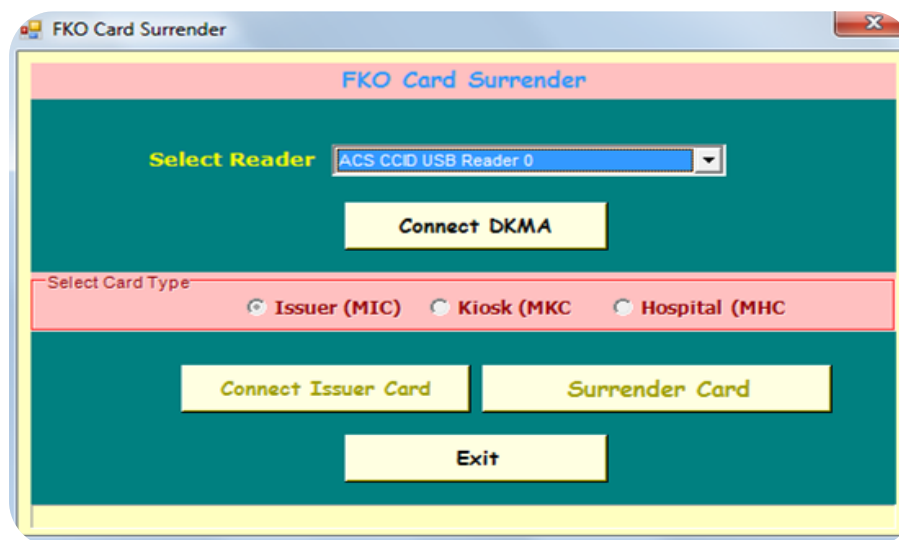


When you select the recharging option the below window will appear on screen. In this window you can see it is asking for:

- Selecting of Reader and Insert DKMA card into the selected reader.
- Connect DKMA.
- Once you connect the DKMA it would prompt for DKMA pin.
- Insert the PIN
- Once the Pin is verified, the two options Issuer and Kiosk options are enabled.
- Select any of the two, according to the requirement, and click on Connect Issuer Card/ Kiosk Card as selected.
- A new window for inserting of PIN would appear. Insert the PIN and click OK
- On successful verification of PIN, the 'Recharge' button (Upload and Recharge in case of MIC) is enabled. Press the Recharge button to start the process of recharging. In case of Kiosk card, the user has to input the value for usage counter and for Issuer card, the counter will be 200 or 300 depending on the memory available on the card.

Card Surrender

This is the process of surrendering the card to DKMA by an FKO. DKMA card is required to do this. The presence of FKO also is required to input his/her PIN.



The process involves uploading of RSBY issuance data if any in case of MIC, resetting the usage counter to zero and initializing the card holder information so that the card can be reissued to another FKO using the 'Personalization' module.

Steps for the Card surrender process:

- As shown in the figure, Insert the card reader and select the card reader accordingly, and click on 'Connect DKMA'.
- Once the DKMA card is connected, the rest of the card types get enabled.
- Select from the card type as shown Issuer, Kiosk, Hospital.
- Insert the FKO card in one of the free card readers, select the card reader and click on 'Connect Issuer Card'. Depending on the type of card the caption may change to Connect Kiosk/Hospital.
- Once the card is connected it would prompt for PIN of the card. Insert the PIN to enable the Surrender Card.
- Click on the Surrender Card and start the process of surrendering the card.

Card Stock Entry

This option allows you to feed the number of cards that have been received from the CKGA on request.

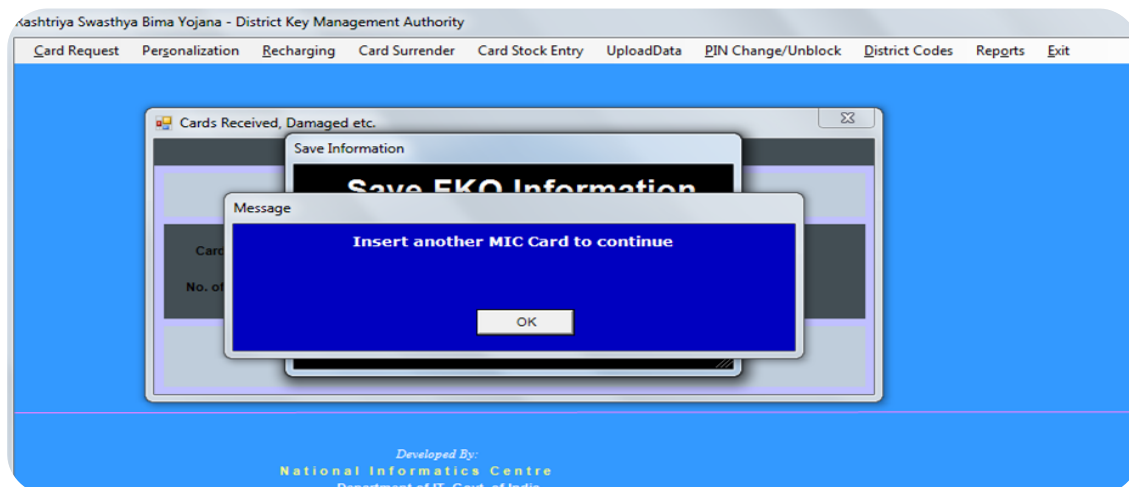
The screenshot shows the 'Card Stock Entry' window within the 'Rashtriya Swasthya Bima Yojana - District Key Management Authority' application. The window has a menu bar with options: Card Request, Personalization, Recharging, Card Surrender, Card Stock Entry, UploadData, PIN Change/Unblock, District Codes, Reports, and Exit. The main window contains a sub-window titled 'Cards Received, Damaged etc.' with the following fields: 'Stock Entry No.' (value: 1), 'Card Type' (dropdown: MHC), 'Received/Damaged' (dropdown: Damaged), 'No. of Cards' (empty text box), and 'Date' (value: 21-03-2012). At the bottom are 'Save' and 'Exit' buttons. The footer text reads: 'Developed By: National Informatics Centre, Department of IT, Govt. of India'.

Enter the details as mentioned in the above window and enter the number of cards that are received.

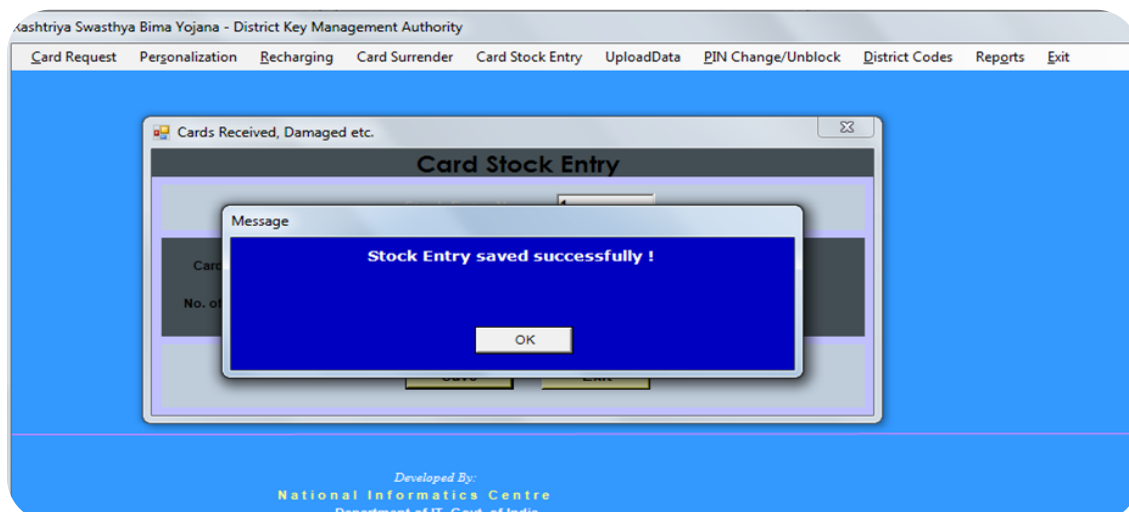
Once you enter the details it will prompt for selecting the card reader as shown in the below window.

The screenshot shows the 'Save FKO Information' window, which is a sub-window of the 'Cards Received, Damaged etc.' window. It prompts the user to 'Select Reader' with a dropdown menu showing 'ACS CCD USB Reader 0'. There are 'Save' and 'Cancel' buttons at the bottom. The background window shows the 'Card Type' (MHC) and 'No. of Cards' fields. The footer text is the same as the previous screenshot: 'Developed By: National Informatics Centre, Department of IT, Govt. of India'.

There is a change in Card Stock Entry; you have to enter all the cards manually in the card reader one by one, as compared to the previous version of the DKMA software. This change allows the entry of Chip Serial Number into the Database.

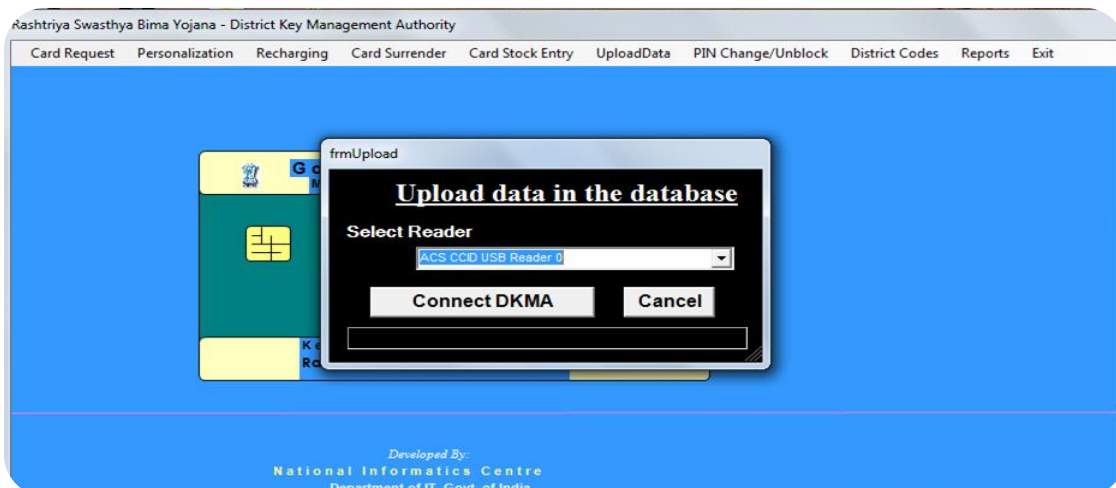


Once you have entered all the cards manually as mentioned in the No. of Cards, it will show you entry successful window as shown below.

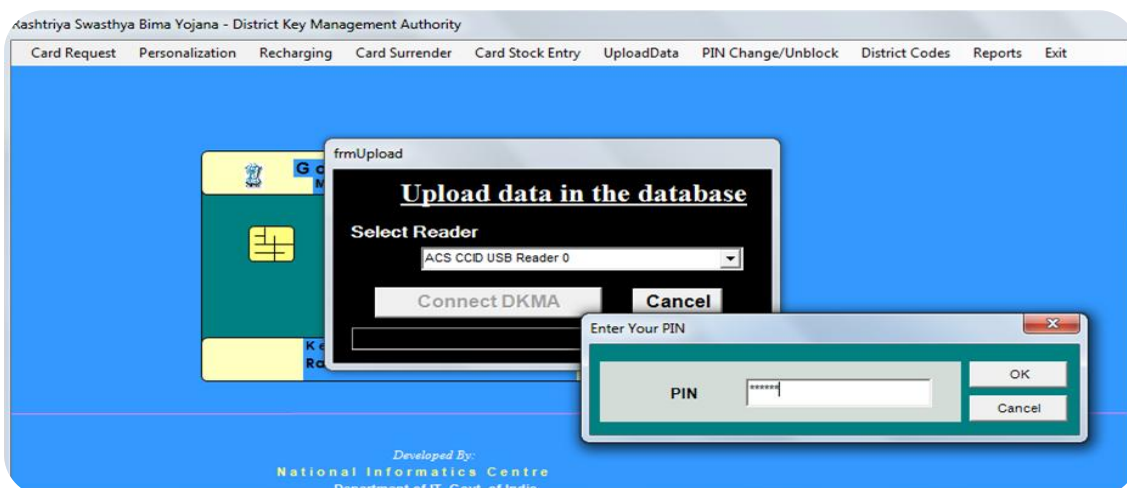


Upload Database

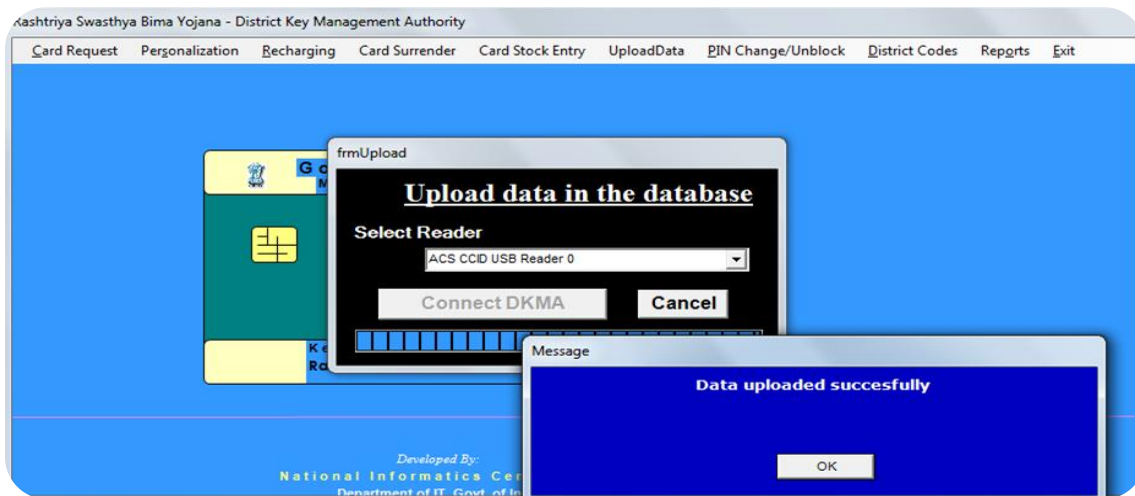
This is the new addition in the new version of DKMA software. The post enrolment database is provided by Insurance Companies as in the format prescribed and digitally signed.



- Once you click on Upload Database, the above window appears on screen for selecting the reader.
- Select the Reader and Connect DKMA.
- Once the DKMA is connected, it will ask for DKMA pin. Enter the Pin and click ok.



- Once the Pin is verified it will show you window for selecting the Signature file from the stored location. This file is digitally signed by the Insurance Company. Once you select the file from the stored location, it will show a Data Upload Successful message as shown:



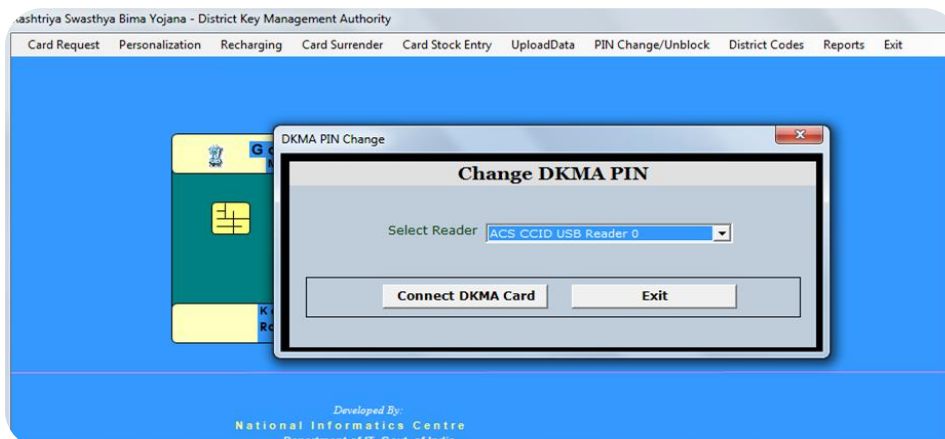
Note: Once the file is loaded, it will be erased from the location it has been selected from. It's recommended that you save the master file at a secure location and load a copy of the database into the application.

PIN Change/Unblock

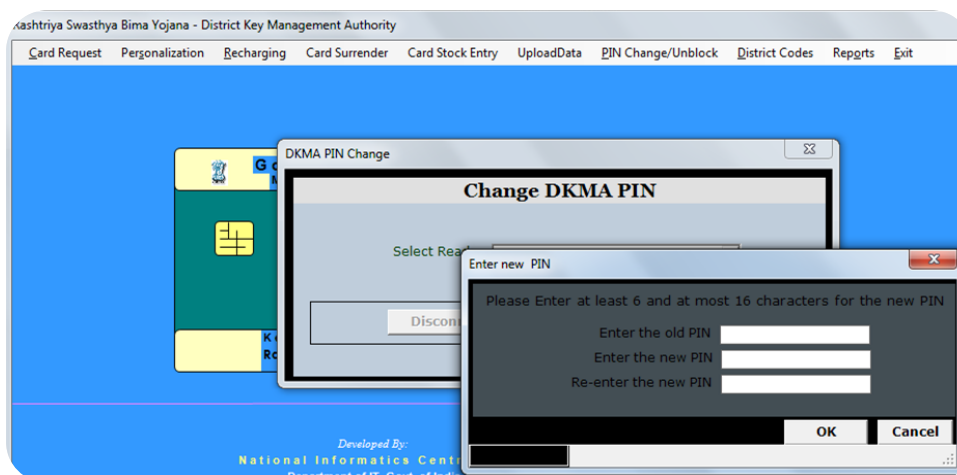
DKMA

- Pin Change

One can change the PIN for the DKMA card as shown in the figure below:



- Insert the DKMA card in one of the readers and Select Reader. Click on Connect DKMA and it will ask you to input the DKMA pin.
- On successful verification of the pin a new window appears; as shown below:

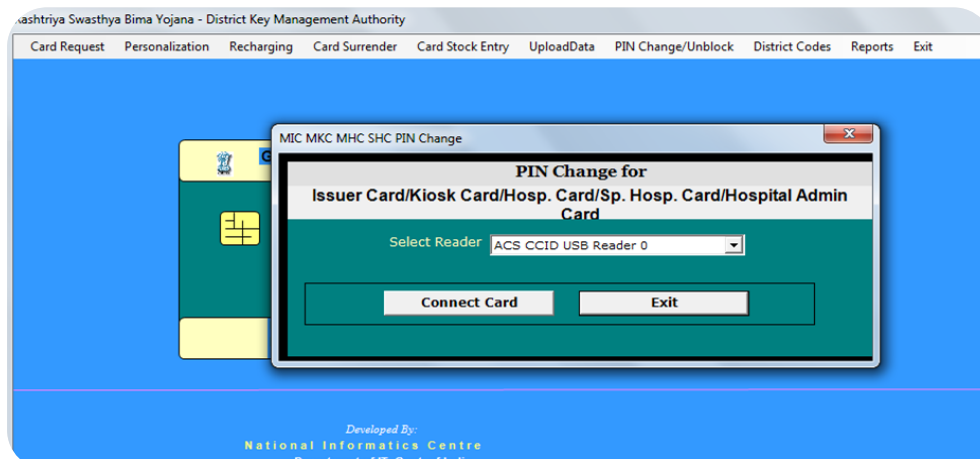


- Enter the Current existing Pin which are using for the DKMA card, in the Old Pin Field. In the New Pin field enter the Pin as desired and the confirm the new pin by re-entering the new pin in the next field.

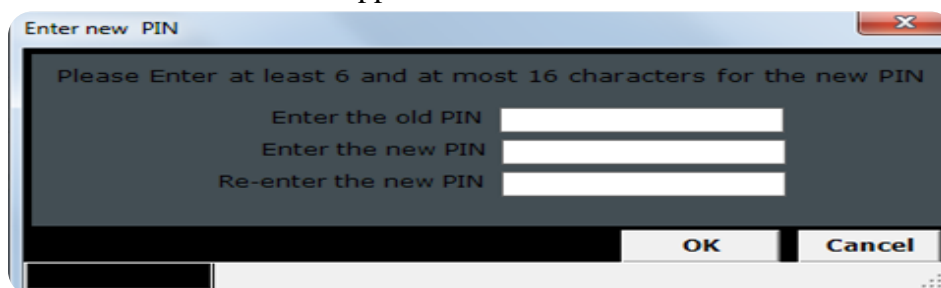
FKO Cards

- PIN Change

FKO card pin be changed and it is also *Recommended that the FKO should change the pin periodically*. On selecting the PIN Change option from the submenu, a window appears as shown below:



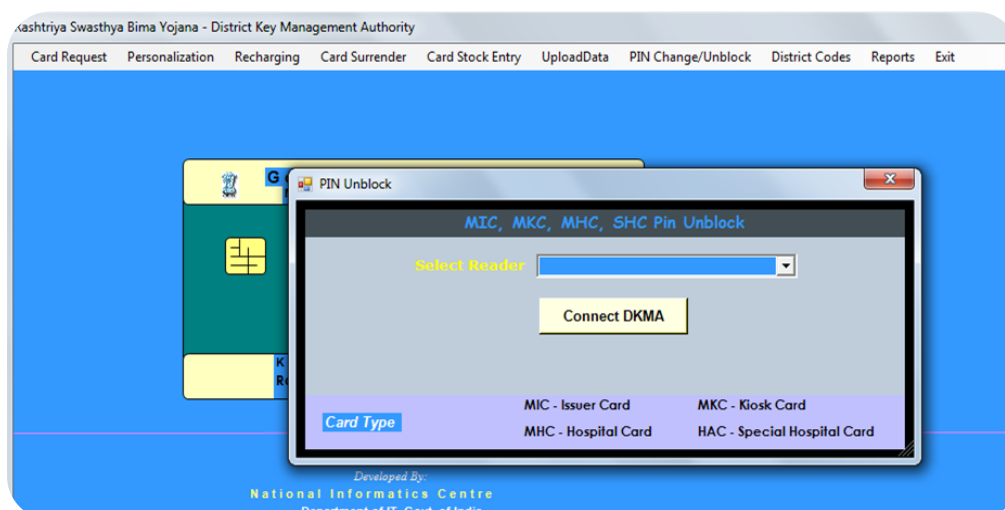
Insert the FKO card and Select the Reader from the drop down menu. Click on Connect Card and a new window appears.



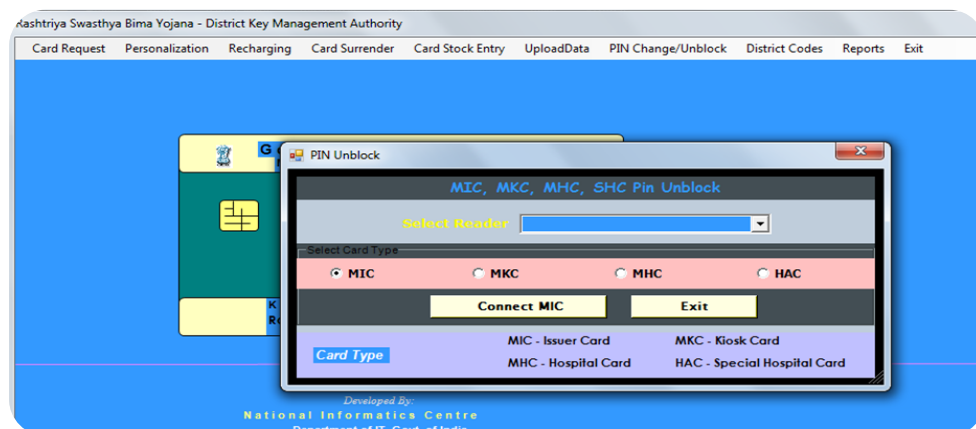
Enter the current pin and then enter the new pin. Confirm the new pin by re-entering the new pin again and click OK to save the pin. A message is displayed for successful pin change.

- Pin Unblock

If in any case the field key card pins get blocked. They can be unblocked at the DKMA. A card can get blocked if the cards maximum attempt of 4 times PIN input is reached. Once it gets blocked the card needs to be unblocked. The DKMA shall unblock the PIN of the FKO card and insert a new default pin.



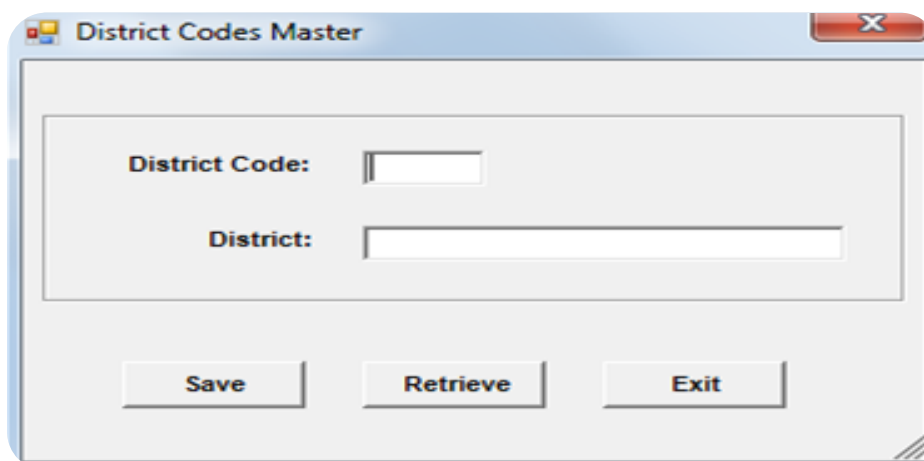
Insert the DKMA card and Select the Reader, and then click on Connect DKMA. On successful verification of DKMA PIN a window screen will appear as shown below:



Select the Card from the option as shown in the figure, and then select the card reader. Insert the card in one of the readers and click 'Connect MIC' (Depending on the selection of the card type the button caption may be Connect MKC/MHC/HAC, respectively). On successful unblocking a message is displayed. The FKO card shall have a new default pin.

District Codes

Use of this option allows you to add district details such as code and name of the district in the district master table in the database, while the existing district names can be viewed by giving the district code and clicking on the 'Retrieve' button. The following window appears on selecting the District Codes option from the Menu.



To add a new district enter the district code and the district name and click on 'Save'.

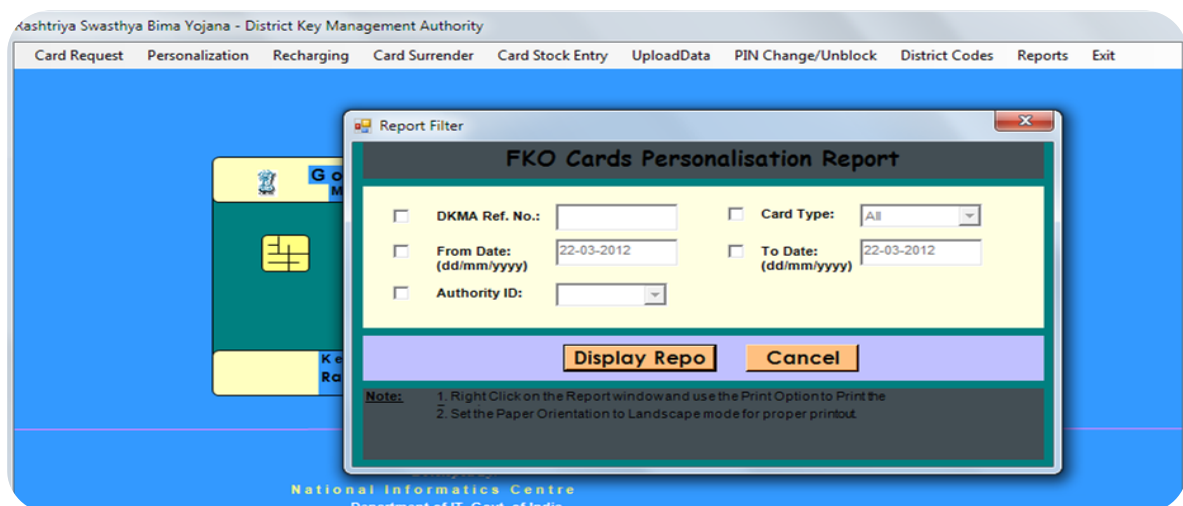
Reports

In Reports you can find the logs of the FKO card that were personalized, number of cards that were issued and cards surrendered against issuance, and also it shows you a log the card stock balance.

- FKO Card Personalization Report

It shows you the details of FKO cards personalized by the DKMA. The user can get details like DKMA reference number, batch number, card number, card type, authority name, authority ID, designation (for MIC/MKC), Hospital ID (for MHC/SHC), department (for MIC/MKC), hospital name (for MHC/SHC), office attached (for MIC/MKC), counter (for MIC/MKC) and personalization date for each FKO card.

On selecting the 'Personalization Report' option from the menu, the following screen is displayed.



- As shown in the figure. There are various parameters, based on which the report shall be generated. You can choose from the parameters by ticking in the check box. The various parameters as shown are:
 - DKMA Ref. No.: it will show the details of FKO cards personalized against a particular DKMA reference number.
 - Card Type: Select cards from MIC, MKC, MHC and SHC. By default the field shows all for all cards.
 - From Date & to Date (dd/mm/yyyy): When you generate a report by selecting this field it will show you the cards personalized and issued in a particular period.
 - Authority ID: It will show the report of cards issued to a particular authority id. The parameters can be a combination of one or more of these values.

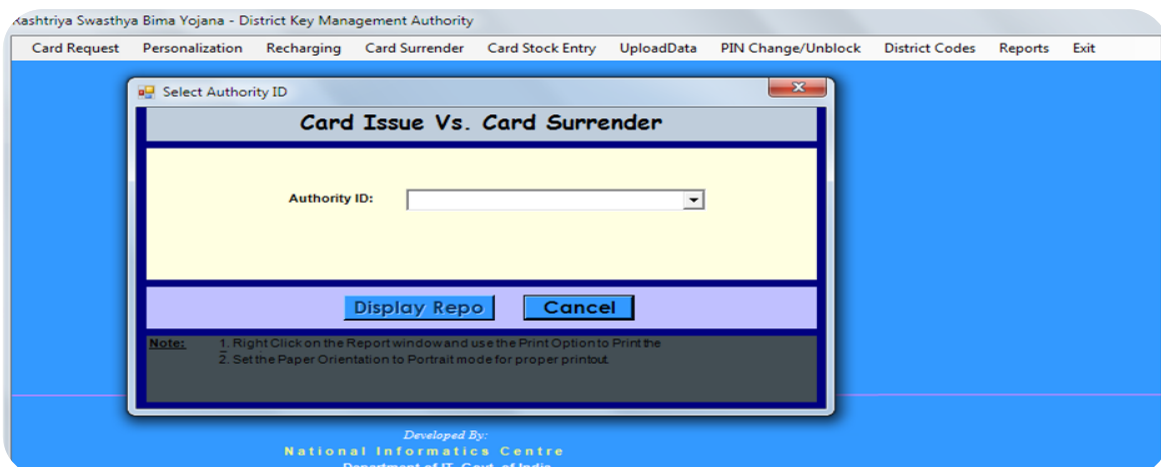
Once you click on 'Display Report', a window will appear on the screen, which will display the details as shown below:

FKO Card Personalization Report											
Sl. No	DKMA Ref. No.	Batch No.	Card No.	Card Type	Authority Name	Auth. ID	Designation/ Hospital ID	Department/ Hospital Name	Office Attached	Counter	Perso Date
1.	13	1	2	KHC	Authority3 Name Maximum25	DLSV0017	Designation3 Maximum 25Ch	Department32 Maximum 25 Ch	Attached Office3 Max 25 C	200	12/03/2008
2.	14	2	1	MIC	Authority2 Name Maximum25	DLSV0017	Designation2 Maximum 25Ch	Department2 Maximum 25 Ch	Attached Office2 Max 25 C	200	11/03/2008
3.	15	3	1	MKC	abvnchdkj5dfjlsdf dfklds	DLAV0018	5kdjask djfaskdfs Ma	5sdksdj kjfaskMaxi	Attached Office5 Max 25 C	200	
4.	15	3	2		abvnchdkj dfjlsdf dfklds	DLAV0018	Akdjask djfaskdfs Ma	fsdksdj kjfaskMaxi	Attached Office2 Max 25 C	200	12/03/2008
5.	16	4	1	MIC	Authority4 Name Maximum25	DLSV0017	Designation4 Maximum 25Ch	Department4 Maximum 25 Ch	Attached Office4 Max 25 C	200	10/03/2008
6.	17	4	1		abvnchdkj5dfjlsdf dfklds	DLRO0019	5kdjask djfaskdfs Ma	5sdksdj kjfaskMaxi	Attached Office5 Max 25 C	200	17/03/2008
7.	18	2	1		IA Authority Name-1	DLRO0019	IA Designation-1	IA department-1	Attached Office5 Max 25 C	200	11/04/2008
8.	19	5	1	SHC	Special Hospital Name1	DLRO0021	SH-11111	Special Hospital-Name-121			01/04/2008
9.	21	4	1	MHC	Hospital card auth name-1	DLSV0022	HOSP-111	Hospital Name-11111111111			02/04/2008
10.	22	5	1	SHC	Special Hospital Name1	DLRO0021	SH-11111	Special Hospital-Name-121			11/04/2008
11.	23	2	2	MIC	New Issuer Card Name-1	DLRO0019	New Issuer Designation	New Issuer Department	New Issuer Office Attac		09/04/2008

If you wish to take a print out of the report. Right Click on the report and click Print. Set the paper Orientation to 'Landscape' before printing.

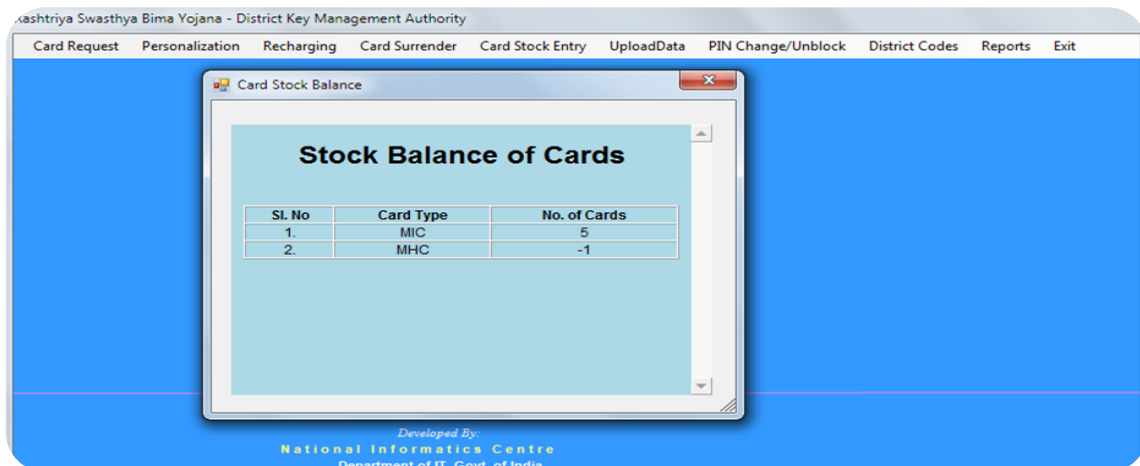
○ FKO Card Issuance and Surrender

This is the new addition in the report menu. It will generate the report for the number of cards issued against the cards surrendered. Shown below is the window:



- FKO Card Stock Balance

Card stock balance shows the available number of cards in stock for personalisation. Shown below is the window:





Abbreviations

DKM – District Key Manager

DKMA – District Key Management Authority

KMS- Key Management System

CKGA – Central Key Generating Authority

RSBY – Rashtriya Swasthya Bima Yojna

FKO – Field Key Officer

MIC – Issuer Card

MKC – Kiosk Card

MHC – Hospital Card

SHC – Special Hospital Card
