

USER GUIDE SIM EXPLORER

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General feedback: info@dekart.com
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3 Glossary

www:

SIM Explorer - the name of the application.

GSM - Global System for Mobile communications.

PLMN - Public Land Mobile Network.

HPLMN - Home PLMN.

PIN/PIN2 - Personal Identification Number / Personal Identification Number 2 (obsolete terms for CHV1 and CHV2, respectively).

PUK/PUK2 - PIN Unblocking Key / PIN2 Unblocking Key (obsolete terms for UNBLOCK CHV1 and UNBLOCK CHV2, respectively).

CHV - Card Holder Verification information; access condition used by the SIM for the verification of the identity of the user.

ATR - Answer To Reset.

RFU - Reserved for Future Use.

ICC - Integrated Circuit(s) Card.

MSISDN - Mobile Station international ISDN number.

SoLSA - Support of Localised Service Area.

AC - Access Condition.

ACL - APN Control List.

ACM - Accumulated Call Meter

ADF - Application Dedicated File.

ADM - Access condition to an EF which is under the control of the authority which creates this file.

ADN - Abbreviated Dialling Number.

AHAG - Ad-Hoc Authentication Group.

AID - Application Identifier.

AK - Anonymity key.

A-Key - Authentication Key.

ALW - ALWays.

AMPS - Analogue Mobile Phone System.

ANSI - American National Standards Institute.

AoC - Advice of Charge.

APDU - Application Protocol Data Unit.

BCCH - Broadcast Control Channel.

BCD - Binary Coded Decimal.

BDN - Barred Dialling Number.

BTS - Base Transmitter Station.

CB - Cell Broadcast.

- **CBMI** Cell Broadcast Message Identifier.
- **CCP** Capability/Configuration Parameter.
- CLA CLAss.
- CLI Calling Line Identifier.
- **CNL** Co-operative Network List.
- **CPBCCH** COMPACT Packet BCCH.
- CTS Cordless Telephony System.
- **DCK** De-personalization Control Keys.
- DCS Digital Cellular System.
- **DF** Dedicated File (abbreviation formerly used for Data Field).
- **DTMF** Dual Tone Multiple Frequency.
- **ECC** Emergency Call Code.
- **EF** Elementary File.
- **EIA** Electronics Industries Alliance (North America).
- eMLPP enhanced Multi-Level Precedence and Pre-emption Service.
- **ETSI** European Telecommunications Standards Institute.
- etu elementary time unit.
- FDN Fixed Dialling Number.
- **GMSI** Group Identity.
- **IC** Integrated Circuit.
- ICI Incoming Call Information.
- **ICT** Incoming Call Timer.
- **ID** Identifier.
- IEC International Electrotechnical Commission.
- **IK** Integrity key.
- **IMSI** International Mobile Subscriber Identity.
- **ISO** International Organization for Standardization.
- **Kc** Cryptographic key; used by the cipher A5.

- Ki Subscriber authentication key; the cryptographic key used by the authentication algorithm.
- KSI Key Set Identifier.
- **LAI** Location Area Information; information indicating a cell or a set of cells.
- **Igth** The (specific) length of a data unit.
- LI Language Indication.
- LND Last Number Dialled.
- LSA ID Localised Service Area Identity.
- LSA Localised Service Area.
- LSB Least Significant Bit.
- **MAC** Message authentication code.
- **MCC** Mobile Country Code.
- **ME** Mobile Equipment.
- **MExE** Mobile Execution Environment.
- MF Master File.
- MMI Man Machine Interface.
- MNC Mobile Network Code.
- MS Mobile Station.
- MSB Most Significant Bit.
- **NAM** Numeric Assignment Module.
- **NET** NETwork.
- **NEV** NEVer.
- NPI Numbering Plan Identifier.
- **OCI** Outgoing Call Information.
- **OCT** Outgoing Call Timer.
- **OFM** Operational Feature Monitor.
- **OPLMN** Operator Controlled PLMN (Selector List).
- OTA Over The Air.
- PDC Personal Digital Communications.

PPS - Protocol and Parameter Select (response to the ATR).

RAND - A RANDom challenge issued by the network.

SDN - Service Dialling Number.

SID - System Identity.

SIM - Subscriber Identity Module.

SMS - Short Message Service.

SRES - Signed RESponse calculated by a SIM.

SSC - Supplementary Service Control string.

SW1/SW2 - Status Word 1 / Status Word 2.

TETRA - TErrestrial Trunk RAdio the identity of the user.

TIA - Telecommunications Industries Association (North America).

TMSI - Temporary Mobile Subscriber Identity.

TON - Type Of Number.

TP - Transfer layer Protocol.

TPDU - Transfer Protocol Data Unit.

TS - Technical Specification.

UNBLOCK CHV1/2 - value to unblock CHV1/CHV2 UNBLOCK CHV2, respectively.

USAT - USIM Application Toolkit.

USIM - Universal Subscriber Identity Module.

VBS - Voice Broadcast Service.

VGCS - Voice Group Call Service.

VLR - Visitor Location Register.

VPLMN - Visited PLMN.

XRES - Expected user RESponse

4 Introduction

4.1 SIM Explorer's purpose and feature highlights

Dekart SIM Explorer is an intelligent tool which allows you to process the contents of a 2G (GSM) or 3G (USIM) card.

SIM Explorer's quick feature list

- 1. View and edit the contents of a SIM card.
- 2. Powerful search mechanism.
- 3. Several scanning modes: *smart scan* is fast and able to find any standard GSM or USIM file; *full scan* will find all the files on the card, even if they are not defined by the standards.
- 4. View information about standard GSM and USIM files, as well as interpret their contents.
- 5. View detailed information about the SIM card and the smart card reader.
- 6. View the status and manage the SIM card's access codes (the state of PIN and PUK, the number of code entering attempts remaining, change the PIN, enable or disable the PIN, unblock the card).
- 7. Backup and restore individual files, as well as the entire SIM card.
- 8. Activate or deactivate files (if you have sufficient privileges).
- 9. Increase cyclic files.
- 10. Manage ADF files.
- 11.Interpret and display SIM/USIM toolkit applications.
- 12.Interpret and display a SIM card's ATR
- 13. Comes with an extendable list of PLMN codes.
- 14. Comes with an extendable list of language codes.

SIM Explorer's highlights

- 1. Ease of use a) the card is managed using the possibilities of a PC (full-sized keyboard, large screen, etc), b) the information is displayed in a human-friendly form, c) the software can operate with the card's contents directly.
- 2. Full control a smart scanning mechanism allows you to find GSM and USIM files, as well as non-standard files on the SIM card, while the ability to manually search for files that meet certain criteria gives you even more flexibility.
- 3. Universal compatibility the software works with SIM cards (of any vendor, issued by any mobile operator) via a smart card reader.

4.2 SIM Explorer's components

SIM Explorer's package consists of the software modules, and this guide.

4.3 System requirements

Hardware requirements

- Personal computer with an available port (ex. COM, USB) for the smart card reader.
- A PC/SC compliant smart-card reader.

Software requirements

- Windows 2000, XP, 2003, Vista
- Smart card reader driver.

4.4 Supported equipment

SIM Explorer supports the following equipment:

SIM-cards

Phase 1, 2, 2+ SIM and USIM cards.

Smart card readers:

SIM Manager works with any PC/SC compliant smart card reader, such as:

- Dekart SIM Card Reader.
- · Datakey DKR smart card reader series.
- GemPlus GemPC smart card reader series.
- OmniKey CardMan smart card reader series.
- Schlumberger Reflex smart card reader series.
- Towitoko CHIPDRIVE smart card reader series.

A full list of supported devices is available on our web-site: http://www.dekart.com/products/supported devices/

5 Installing, updating and removing SIM Explorer

- Installing SIM Explorer;
- Updating SIM Explorer;
- Uninstalling SIM Explorer.

5.1 Installing SIM Explorer

Make sure that the smart card reader's driver is installed before installing SIM Explorer.

- 1. Close your currently open applications before installing SIM Explorer.
- 2. Run SIMExplorer.exe to start the installation process.
- 3. Once the welcome screen is shown, click **Next** to continue the installation.



5. Read the license agreement and accept its terms in order to continue the installation.



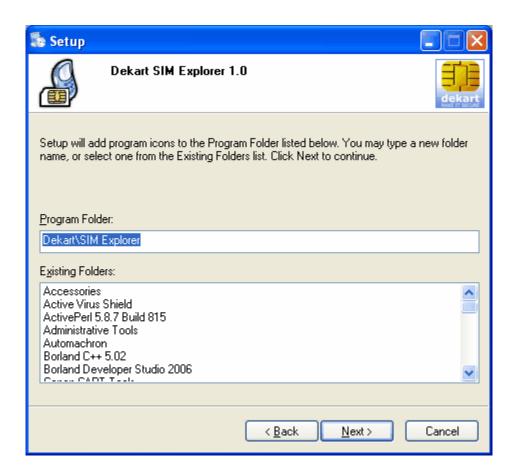
6. Enter the registration details.



7. Choose the folder in which SIM Explorer will be installed..



8. Choose SIM Explorer's **Start Menu** entry.



9. Additional installation options can be chosen at this step.



10. Press **Finish** to complete the installation.



5.2 Updating SIM Explorer

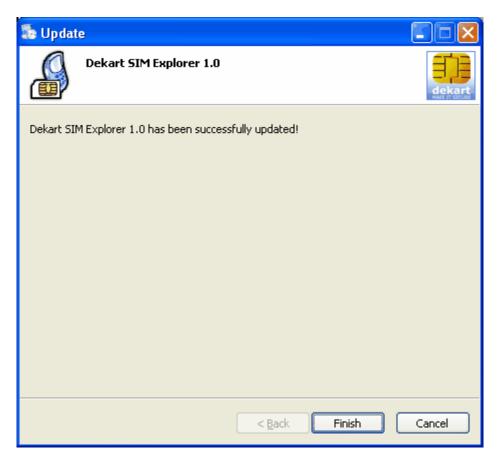
1. If SIM Explorer's installation program is started again, it will find an existing copy of the program and offer to update it.



- 2. Click **Next** to continue; you will be shown the license agreement, which must be accepted in order to proceed with the installation.
- 3. SIM Explorer will collect the information it needs in order to update itself; click **Next** to continue.



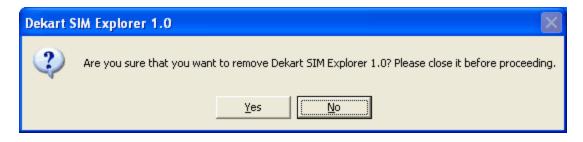
4. Press **Finish** to complete the update.



Note. The system needs to be restarted after the update.

5.3 Uninstalling SIM Explorer

Press Start\Programs, choose the folder you indicated at step 8 of SIM Manager's installation process (see Installing SIM Explorer), and click Uninstall. An alternative way to do that is to go to Control Panel\Add or remove programs, find SIM Explorer in the list, and press Uninstall. The following window will be shown on the screen.



Click **Yes** if you wish to continue uninstalling the software.

1. The following window will be shown on the screen when SIM Explorer is uninstalled.



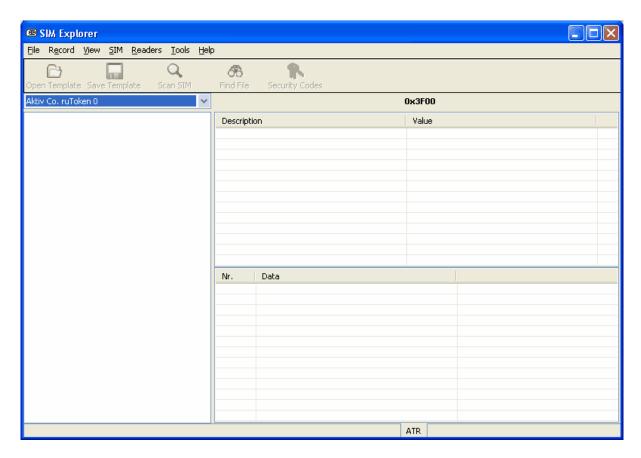
6 Using SIM Explorer

6.1 Starting the application

The application can be started in one of the following ways:

- · Go to **Start\Programs**, choose the program's folder (see <u>step 8</u> of <u>Installing SIM Explorer</u>), and launch the application.
- Open the folder to which the program was installed (see step 7 of Installing SIM Explorer), and launch the application.

The program's main window will be shown on the screen. If no smart card readers were found, or if there are multiple card readers available, SIM Explorer's window will look as follows:



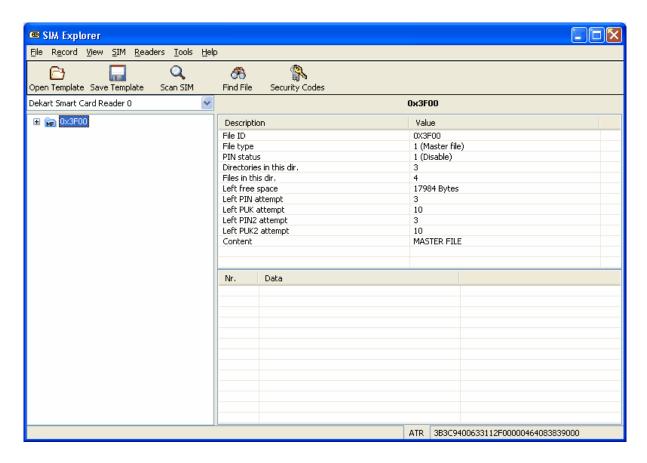
The top part contains the application's toolbar. You can perform an action by pressing the buttons on the toolbar, or by finding the appropriate item in the menu (*File, Record, View, SIM, Readers, Tools, Help*).

The left side of the window contains a list of available smart card readers. If a SIM card was scanned, its directory structure will be shown under the list of readers.

The right side of the window displays information about the currently selected file or directory, as well as an interpreted version of its contents.

Toopen a SIM card:

- 1. Plug the card into the card reader.
- 2. If there are multiple smart card readers in the system, choose one from the list.



6.2 Available operations

SIM Explorer provides the following functionality:

Files on the SIM card

Open Template
Save Template
Find File
View File Binary
Edit File Binary

read the directory structure of a SIM using a template file save the directory structure of the SIM to a template file

find file

view the file in a Hex-editor edit the file in a Hex-editor

Backup File backup a file

Restore File restore file from a backup

Invalidate (Deactivate) File deactivate file Rehabilitate (Activate) File activate file increase File (Cyclic) increase cyclic file

Managing records

View Record Binary view the record in a Hex-editor Edit Record Binary edit the record in a Hex-editor

Managing a SIM card

Security Access Codes manage access codes (enter PIN or PUK, enable or disable PIN

protection, change PIN, unblock SIM)

Backup SIM backup the data of a SIM card
Restore SIM restore SIM from a backup
ATR Details interpret the card's ATR

Scan SIM card

Smart-card reader related

operations

Refresh Readers List refresh the list of smart-card readers

Reader Attributes view information about a smart-card reader and the SIM card

plugged into it

Code references

PLMN Coding manage the PLMN codes list Languages Coding manage the languages codes list

Application settings

View (File Summary, File Contents) enable or disable the display of SIM card's files or their contents

Customize customize SIM Explorer's appearance (interface language, and

whether security codes masking is enabled or disabled)

Viewing information about the program

About

view information about the program's version, as well as the

registration information

Exit quit the application

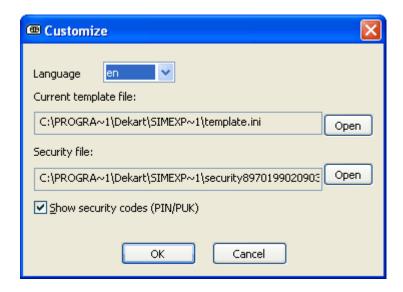
6.3 Configuring SIM Explorer

1. You can customize the appearance of SIM Explorer's main window by pressing **View** in the menu, and checking the desired options:



- File Summary display brief information about the currently selected file;
- File Contents display the contents of the currently selected file;

- You can check only one of the options, or both;
- 2. The application's interface language can be changed via *Tools -> Customize*.

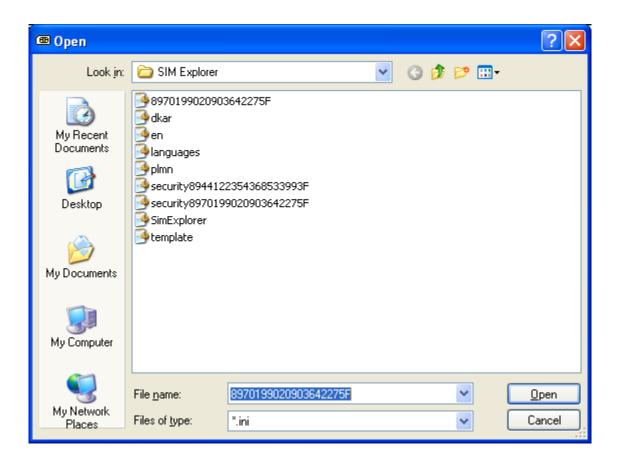


- 3. Show security codes (PIN/PUK) allows you to control how security codes will be displayed on the screen: masked by asterisks (more secure), or shown in a human-readable form (less likely to enter an incorrect code).
- 4. Press **OK** to apply the new settings.
- 5. Go to *Tools -> Save Settings* to save the new settings.

6.4 Operating with the files of a SIM card

6.4.1 Reading the directory structure of a card using a template

When SIM Explorer is started, it will automatically read the currently plugged-in card, using the default template. To choose a different template, press **Open Template** or go to **File -> Open Template**. Choose the template file, then press **Open.**



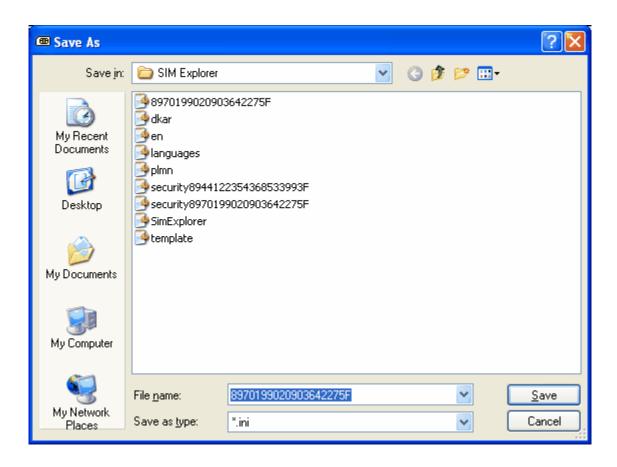
Note. A template can be created in one of the following ways:

- Perform a full scan of the card;
- Find specific files on the card.

Then save the resulting directory structure to a new template file.

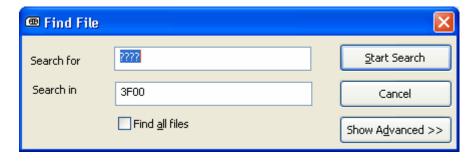
6.4.2 Creating a new template

When performing a <u>full scan</u> of the card, or <u>finding specific files</u> on the card, the file structure shown by SIM Explorer is modified; this structure can be saved to a template file for future use. To save a template, press **Save Template** or go to *File -> Save Template*.

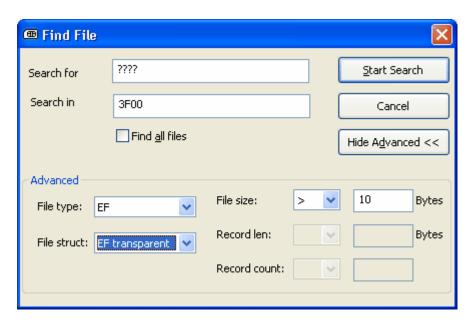


6.4.3 Finding files on the SIM

To find a specific file, or a group of files on the SIM, press Find File or go to File -> Find File.



Enter a file mask in the *Search for* field, and the name of the directory in which the file(s) should be searched in the *Search in* field. Press **Start Search** to continue. The first file that matches the given criteria will be shown; if you wish to find all the files, check *Find all files*. Additional search criteria can be defined by pressing **Show Advanced >>**.

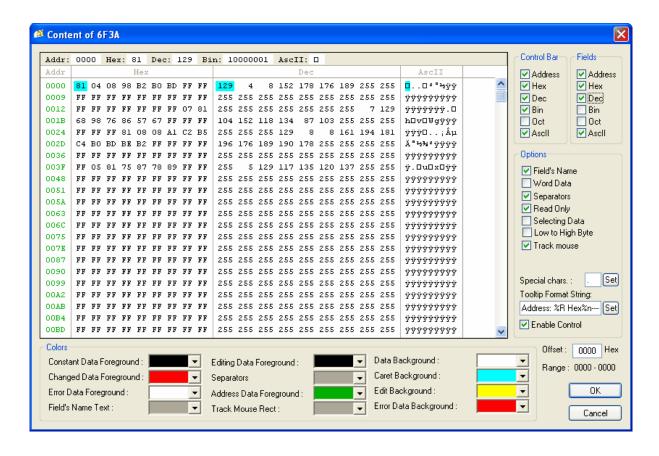


Depending on the chosen File type, the following criteria can be set: *File struct, File size, Record len, Record count.* Press **Start Search** to continue.

6.4.4 Viewing a file in binary

In certain cases you may wish to view a record in a Hex-editor:

- 1. Open the SIM card.
- 2. Choose the desired file from the directory structure.
- 3. Go to File -> View File Binary (or press F3, or double-click the file).



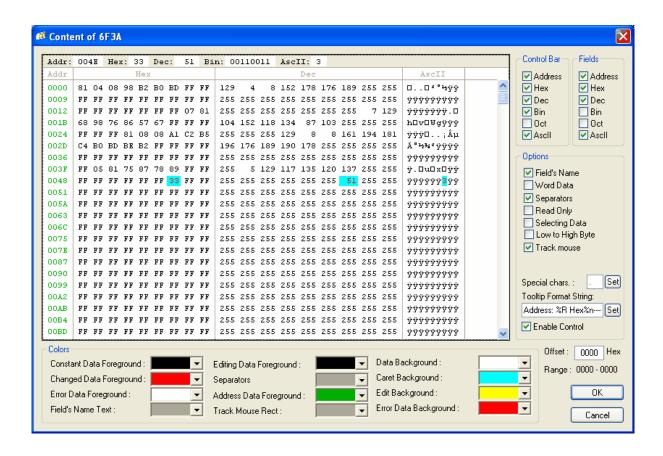
6.4.5 Editing a file in binary

SIM Explorer allows you to edit files in a Hex-editor.

Note 1. Some files can only be edited if you have the required access privileges.

Note 2. To increase cyclic files, use the <u>Increase File (Cyclic)</u> feature.

- 1. Open the SIM card.
- 2. Choose the desired file from the directory structure.
- 3. Go to File -> Edit File Binary (or press F4) to open the file editor.
- 4. To edit a byte, double-click it, then enter the new value.
- 5. Press Enter to confirm.
- 6. Press **OK** to close the editor.



6.4.6 Backing up a file

To backup a file on the SIM card, follow these steps:

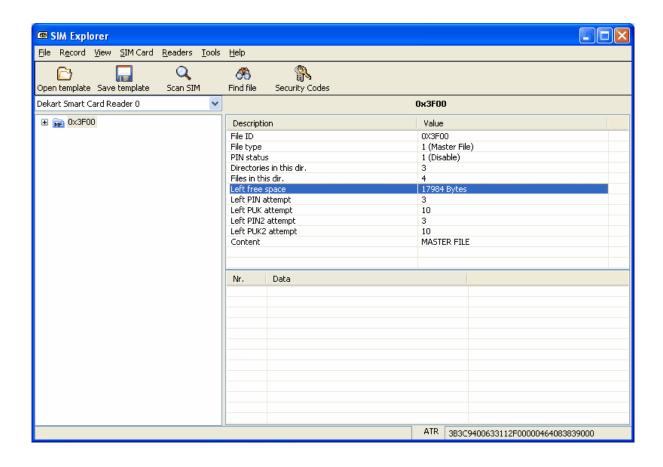
- 1. Open the SIM card.
- 2. Choose the file (enter the access code if requested).
- 3. Go to File -> Backup File.
- 4. Choose the name and the path to the backup file.
- 5. Press Save.

6.4.7 Restoring a file from a backup

To restore a file from a previously made backup, follow these steps:

- 1. Open the SIM card.
- 2. Go to File -> Restore File.
- 3. Choose the backup file.
- Press Open.

Note. Make sure the size of the SIM card is large enough to fit the contents of the backup file. To check the available free space, view the properties of the 3F00 directory.



6.4.8 Deactivating/Activating a file

To activate or deactivate a file, follow these steps:

- 1. Open the SIM card.
- 1. Choose the desired file from the directory structure.
- 2. Go to File -> Invalidate (Deactivate) File to deactivate a file; to activate it, go to File -> Rehabilitate (Activate) File.

Note. Some files cannot be activated or deactivated unless you have the required access privileges.

6.4.9 Increasing a cyclic file

To increase a cyclic file, follow these steps:

- 1. Open the SIM card.
- 2. Choose the desired file from the directory structure.
- 3. Go to File -> Increase File (Cyclic).
- 4. Double-click the word you wish to edit.
- 5. Press Enter.
- 6. Press **OK** to close the Hex-editor.

You will notice that the records of the cyclic files were shifted after the update.

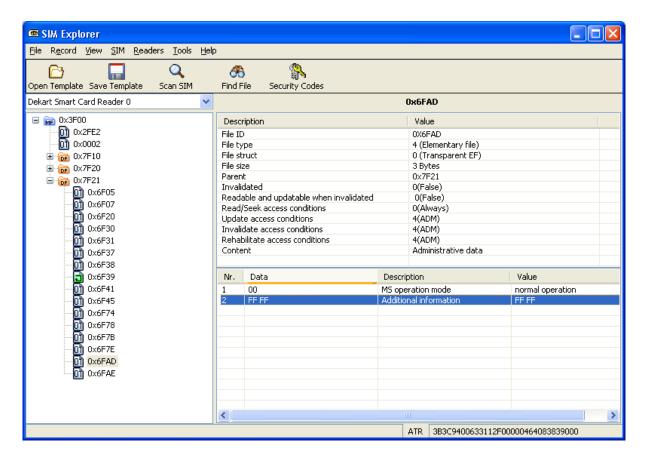
Note. Some files cannot be modified unless you have the required access privileges.

6.5 Manipulating file records on the SIM card

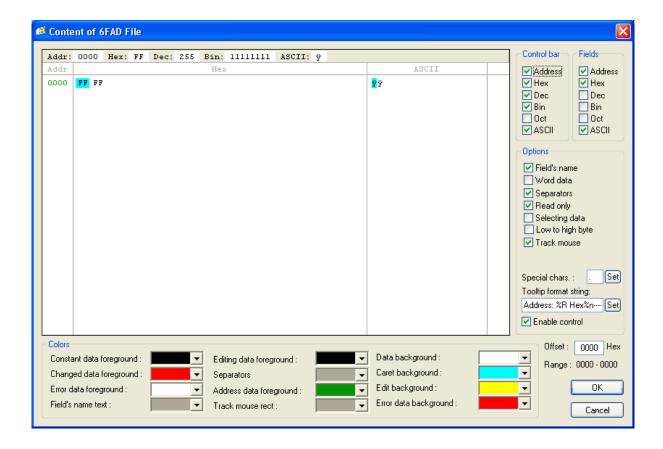
6.5.1 Viewing a record

To view a selected in the Hex-editor, follow these steps:

- 1. Open the SIM card.
- 2. Choose the desired file from the directory structure, then select the record you wish to view.



3. Go to **Record -> View Record Binary** (or press **F3**, or double-click the record).

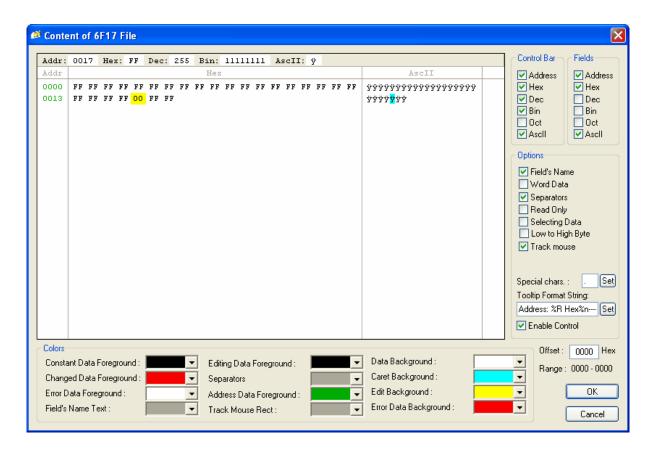


6.5.2 Editing a record

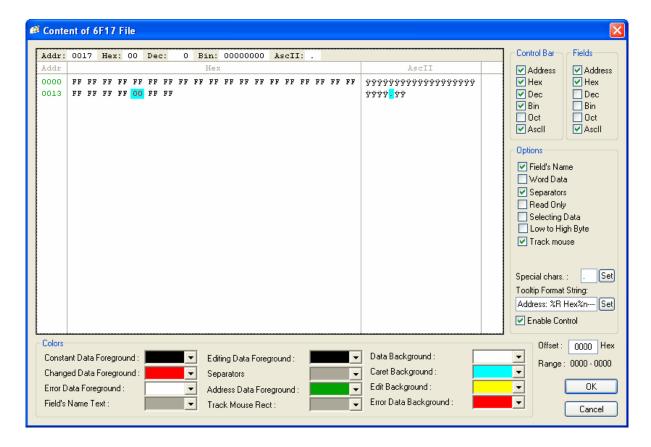
Records can be edited in SIM Explorer's built-in Hex-editor.

Note. Some files can only be edited if you have the required access privileges.

- 1. Open the SIM card.
- 2. Choose the desired file from the directory structure, and then indicate the record you wish to edit.
- 3. Go to Record -> Edit Record Binary (or press F4) to open the Hex-editor.
- 4. To edit a byte, double-click it.



3. Press Enter to apply the changed value.



4. Press **OK** to close the Hex-editor.

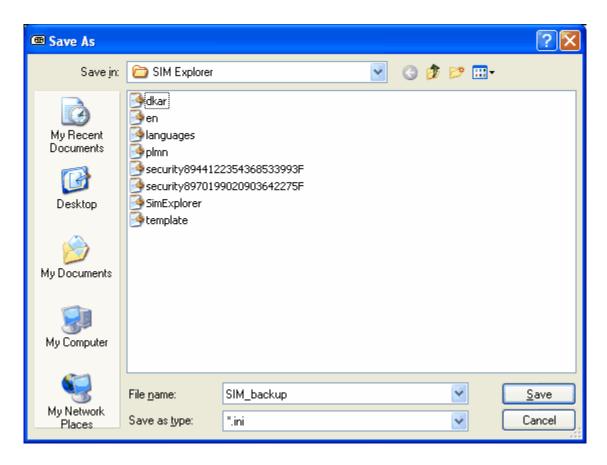
6.6 Operating with the SIM card

6.6.1 Backing up a SIM card

In case the mobile phone gets lost, or if the SIM card is damaged, you can lose all your data. To avoid such cases, we strongly recommend you to use SIM Explorer's SIM backup feature.

To backup a SIM card, follow these steps:

- 1. Scan the SIM card.
- 2. Provide the PIN codes.
- 3. Go to SIM -> Backup SIM.



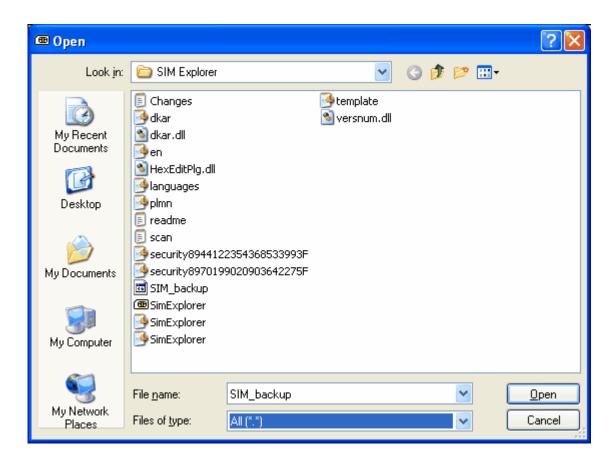
Choose the name and the path to the backup file, then press **Save**. The progress of the backup process will be shown on the screen. Once the backup is complete, a copy of a card is obtained, the contents of which matches the contents of the directory structure on the left.

6.6.2 Restoring a SIM card from a backup

To restore a SIM card from a previously made backup, follow these steps:

- 1. Insert the SIM card into the reader.
 - Note. Make sure the size of the SIM card is large enough to fit the contents of the backup file.
- 2. Choose the smart card reader from the list.
- 3. Go to SIM -> Restore SIM.

Choose the SIM backup file and press Open.

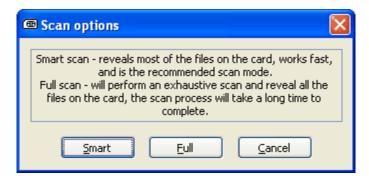


The progress of the restore process will be shown on the screen.

6.6.3 Scanning a SIM card

The SIM card must be scanned in order to obtain detailed information about the contents of the SIM card and its directory structure.

1. After you open a card, go to **SIM** -> **Scan**. You will be asked to choose a scan mode.



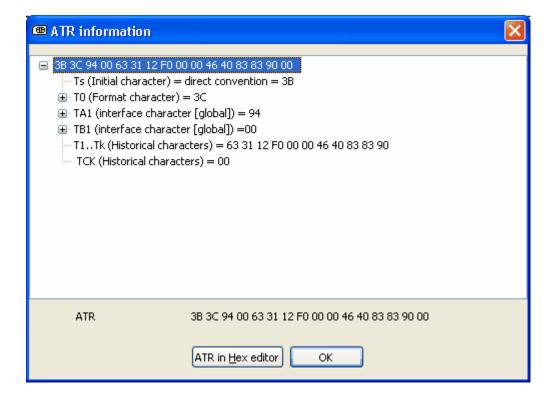
- 2. Choose the **Smart** mode if you are looking for files that are typical to SIM cards.
- 3. Choose the Full mode if you wish to find all the files that are located on the SIM card.

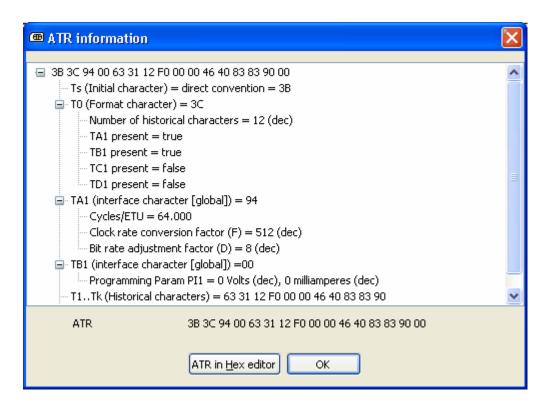
The scan process may take a while, especially if performed in the Full mode. The progress of the

procedure will be shown on the screen. Once the scan is complete, the file-structure on the left will be updated, while SIM Explorer's log will contain information about the number of found files and the time it took to complete the scan.

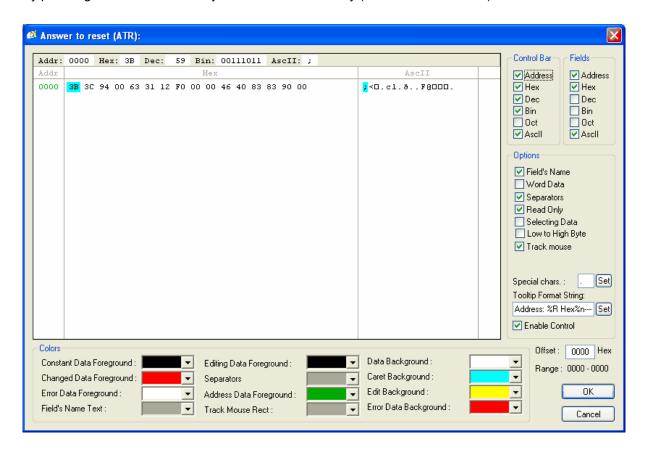
6.6.4 Interpreting the ATR of a SIM

The ATR of a SIM card is shown in the bottom right corner of SIM Explorer's window. The ATR can be interpreted by choosing **SIM** -> **ATR Details**.



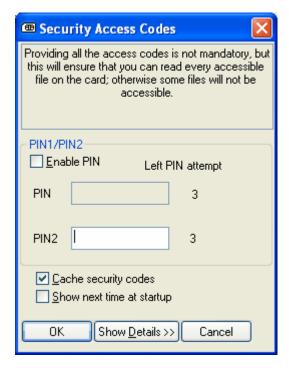


By pressing ATR in Hex Editor you can view and modify (if the card allows this) the ATR.



6.6.5 Operating with security codes

Some of the areas of a SIM card are protected, accessing them is only possible by providing a valid PIN code. The PIN codes can be supplied via **SIM** -> **Security Access Codes**.



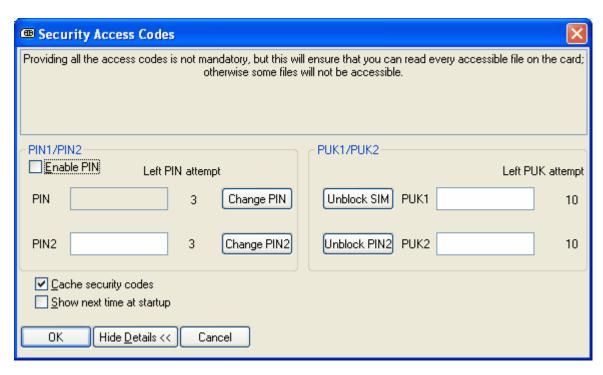
Note. To avoid cases in which you accidentally type in a wrong PIN, enable **Show security** codes (PIN/PUK).

1. To verify the SIM card's PIN, check Enable PIN, then enter the PIN and press OK.

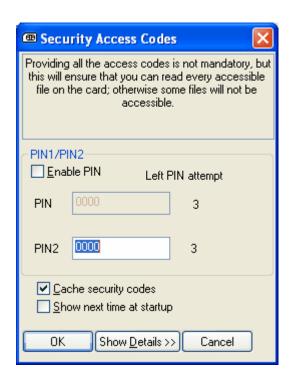


- 2. To verify the card's PIN2, enter it, and press OK.
- 3. To view more details about the card's access codes, press **Show Details >>**. You will see the state of the PIN and that of the PUK, and the number of entry attempts left.

Note: if a USIM card is accessed in 3G mode, the information about the number of remaining entry attempts will not be available.



- 4. To enable PIN-code protection, press Enable PIN and enter the PIN.
- 5. To change the PIN, press *Enable PIN*, enter the current PIN, then press **Change PIN**. You will be asked to enter the new PIN, and then confirm it.
- 6. To change PIN2, enter the current PIN2, then press **Change PIN2**. If you pressed **Change PIN2** without entering the current code, the *Enter old PIN2* prompt will be shown on the screen.
- 7. Press Cache security codes if you want SIM Explorer to remember them (thus the codes do not have to be entered nex time the card is used).
 Note: the access codes are stored in plain text in SIM Explorer's folder (see step 7) in the file security[ICCID].ini.



5. Check Show next time at startup if you want the **Security Access Codes** window to be shown next time a SIM card is open.

If an invalid <u>PIN</u> is entered multiple times, the number of remaining entry attempts will become zero. In this case the card cannot be used unless it is <u>unblocked</u>.

6.6.6 Unblocking a PIN

If an invalid <u>PIN</u> was entered multiple times, the number of PIN entering attempts will become 0. In this case the SIM card cannot be accessed unless the PIN is unblocked. To unblock a PIN using SIM Explorer:

- 1. Go to SIM -> Security Access Codes.
- 2. Press Show Details >>.
- 3. Enter PUK1 and press Unblock SIM to unblock the SIM card.
- 4. Enter PUK2 and press Unblock PIN2 to unblock PIN2.
- 5. Once the card is successfully unblocked, SIM Explorer will prompt you for a new PIN.

If an incorrect PUK is entered multiple times, the SIM card is permanently blocked!

6.7 Managing smart-card readers

6.7.1 Updating the list of smart-card readers

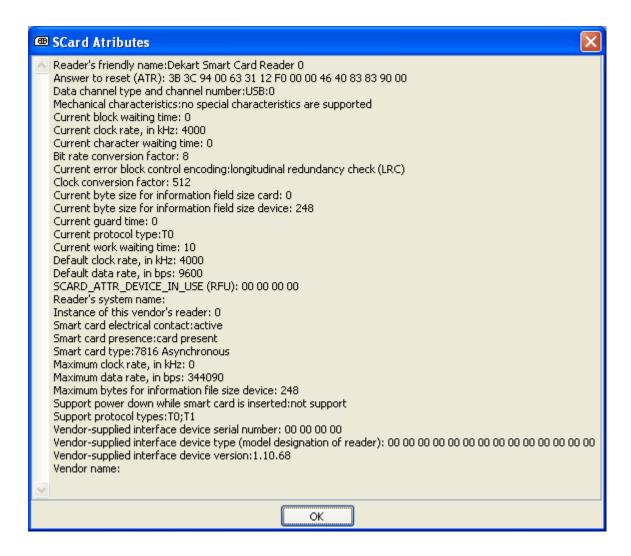
When a new card reader is plugged into the system, the list of available readers will be updated automatically.

If you wish to manually update the list, go to Readers -> Refresh Readers List.

6.7.2 Viewing the properties of a smart-card reader and of the current SIM card

To view the properties of the smart-card reader that is in use, as well as the properties of the SIM card that is currently in use:

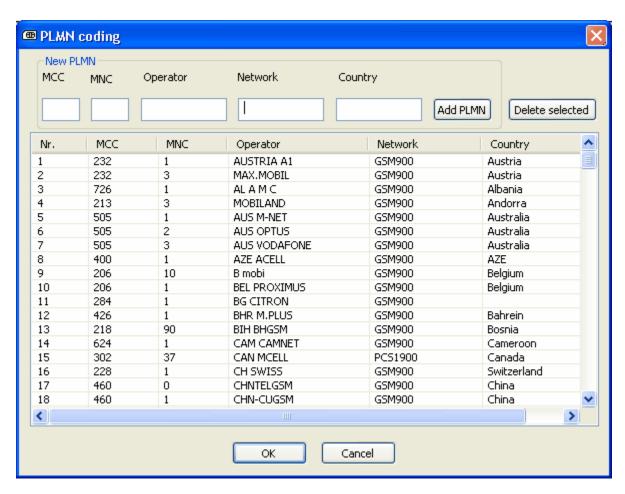
- 1. Open a SIM card.
- 2. Go to Readers -> Reader Attributes.



6.8 SIM Explorer's additional features

6.8.1 Managing the library of PLMN codes

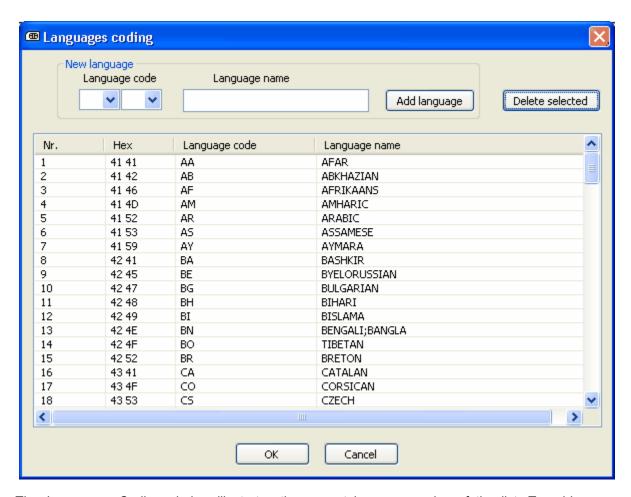
SIM Exporer comes with a built-in library of PLMN codes. The list can be viewed and updated via **Tools -> PLMN Coding**.



The *PLMN Coding* window illustrates the current PLMN codes of the list. To add a new code, fill in the fields (*MCC, MNC, Operator, Network, Country*) and press **Add PLMN**. To delete an existing code, select it and press **Delete Selected**.

6.8.2 Managing the library of language codes

SIM Exporer comes with a built-in library of language codes. The list can be viewed and updated via **Tools -> Languages Coding**.



The Languages Coding window illustrates the current language codes of the list. To add a new language code, fill in the fields (Language code, and Language Name) and press **Add Language**. To delete an existing code, select it and press **Delete Selected**.

6.9 Viewing SIM Explorer's version information

To view details about the program's version, go to *Help -> About...*.



The window that is shown on the screen will display detailed version information about each of SIM Explorer's components.



If you are using an unregistered version of SIM Explorer, the About window will look slightly different, see Registering SIM Explorer.

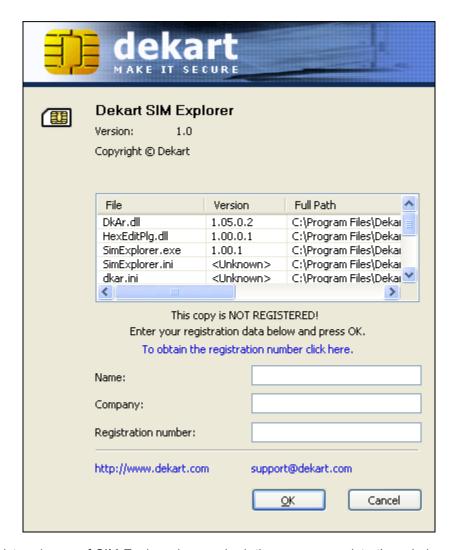
6.10 Exiting SIM Explorer

To quit SIM Explorer, go to *File -> Exit*, or click the program window's close button.

7 Additional information

7.1 Registering SIM Explorer

To register SIM Explorer, enter your registration information in the program's *About* window.



If your unregistered copy of SIM Explorer has expired, the program registration window will be shown next time you start the application.



If you use a trial version of the program, please, use the Dekart <u>Buy on-line page</u> to purchase a registration number. After your transaction is processed, you will receive an email with the registration number.

7.2 Error messages

Error message

Providing all the access codes is not mandatory, but this will ensure that you can read every accessible file on the card; otherwise some files will not be accessible.

New PIN and confirmation is different. New PIN2 and confirmation is different

SIM card is blocked, click Details to enter PUK1

PIN2 is blocked, click Details to enter PUK2

PUK1 is blocked PUK2 is blocked

Verify PIN1 Error Verify PIN2 Error

Suggested actions

Try to free up some space on the SIM card by deleting unused records, then attempt to perform the operation again

Enter the PIN one more time, making sure that the original PIN and the confirmation PIN are identical

The SIM card is blocked, to unblock it, go to SIM -> Security Access Codes -> Details and enter PUK1

PIN2 is blocked, to unblock it, go to SIM -> Security Access Codes -> Details and enter PUK2

The SIM card is blocked

Perform the operation again, making sure that you enter the right PIN

Note. If you encounter error messages that are not listed above, contact Dekart's technical support: http://www.dekart.com/support/howto/howto-contact-us/.

7.3 Files SIM Explorer can handle

Below is a list of GSM and USIM files SIM Explorer can interpret.

File	Description
0x2FE2	ICC Identification)
0x2F05	Extended language preference)
0x4F30	SAI (SoLSA Access Indicator) (if parent is 0x5F70)
0x4F30	Phone Book Reference file (if parent is 0x5F3A)
0x4F31	SoLSA LSA List
0x6F05	Language preference
0x6F07	International Mobile Subscriber Identity (IMSI).
0x6F20	Ciphering key Kc
0x6F30	PLMN selector
0x6F31	HPLMN search period
0x6F37	ACM maximum value
0x6F38	SIM service table (if parent is 0x7F20 or 0x7F21)
0x6F38	USIM Service Table (if parent is 0xADF0 or 0xFFF0)
0x6F39	Accumulated call meter
0x6F3E	Group Identifier Level 1
0x6F3F	Group Identifier Level 2
0x6F46	Service Provider Name
0x6F41	Price per unit and currency table
0x6F45	Cell broadcast message identifier selection
0x6F74	Broadcast control channels
0x6F78	Access control class
0x6F7B	Forbidden PLMNs
0x6F7E	Location information
0x6FAD	Administrative data
0x6FAE	Phase identification
0x6FB1	Voice Group Call Service
0x6FB2	Voice Group Call Service Status
0x6FB3	Voice Broadcast Service
0x6FB4	Voice Broadcast Service Status

0x6FB5	Enhanced Multi Level Pre-emption and Priority
0x6FB6	Automatic Answer for eMLPP Service
0x6F48	Cell Broadcast Message Identifier for Data Download
0x6FB7	Emergency Call Codes
0x6F50	Cell broadcast message identifier range selection
0x6F2C	De-personalization Control Keys
0x6F32	Co-operative Network List
0x6F51	Network's Indication of Alerting
0x6F52	GPRS Ciphering key KcGPRS
0x6F53	GPRS location information
0x6F54	SetUpMenu Elements
0x6F60	PLMN Selector with Access Technology
0x6F61	Operator controlled PLMN Selector with Access Technology
0x6F62	HPLMN Access Technology
0x6F63	CPBCCH Information
0x6F64	Investigation PLMN Scan
0x6F3A	Abbreviated dialling numbers
0x6F3B	Fixed dialling numbers
0x6F3C	Short messages
0x6F3D	Capability configuration parameters
0x6F40	MSISDN
0x6F42	Short message service parameters
0x6F43	SMS status
0x6F44	Last number dialled
0x6F49	Service Dialling Numbers
0x6F4A	Extension1
0x6F4B	Extension2
0x6F4C	Extension3
0x6F4D	Barred Dialling Numbers
0x6F55	Extension4
0x6F4E	Extension4 (if parent is 0x7F10)
0x6F4E	Extension5 (if parent is 0xADF0 or 0xFFF0)
0x6F47	Short message status reports
0x6F65	RPLMN Last used Access Technology
0x4F40	MExE-ST
0x4F41	ORPK
0x4F42	ARPK

0x4F43	TPRPK
0x4F20	IMG (if parent is 0x5F50)
0x4F20	GSM Ciphering key Kc (if parent is 0x5F3B)
0x2F00	Application directory
0x2F06	Access rule reference
0x4F22	Phone book Synchronisation Counter
0x4F23	Change Counter
0x4F24	Previous Unique Identifier
0x4F52	GPRS Ciphering key KcGPRS
0x4F63	CPBCCH Information
0x4F64	Investigation PLMN Scan
0x6F06	Access Rule Reference
0x6F08	Ciphering and Integrity Keys
0x6F09	Ciphering and Integrity Keys for Packet Switched domain
0x6F56	Enabled Services Table
0x6F57	Access Point Name Control List
0x6F58	Comparison Method Information
0x6F5B	Initialisation values for Hyperframe number
0x6F5C	Maximum value of START
0x6F73	Packet Switched location information
0x6F80	Incoming Call Information
0x6F81	Outgoing Call Information
0x6F82	Incoming Call Timer
0x6F83	Outgoing Call Information
0x6FC3	Key for hidden phone book entries
0x6FC4	Network Parameters

Below is a list of USIM files SIM Explorer can interpret (ADFusim\5F3Aphonebook).

ADN	Abbreviated dialling numbers
IAP	Index Administration Phone book
EXT1	Extension1
SNE	Second Name Entry
ANR	Additional Number
PBC	Phone Book Control
GRP	Grouping file

AAS Additional number Alpha String

GAS Grouping information Alpha String

UID Unique Identifier EMAIL e-mail address

CCP1 Capability Configuration Parameters 1

SIM/USIM toolkit applications

ADF Application Dedicated Files

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