

USER MANUAL Key_P1 MultiClet Digital guardian



Abstract

The present document is a user manual for operating the Key_P1 MultiClet Digital guardian information system. The general information about the Key_P1 device, its functions, features of its installation and operation are specified in the document. Before installation and operation of the Key_P1 device it is necessary to study the present guide attentively. The Key_P1 device must be operated following the general safety precautions and physical security of the PC. Device available to order on telephone or in the web-site. Cryptographic functions can not modified by user. The device Key_P1 MultiClet is patented by MultiClet corp. User install application "Key_P1 Manager" independently, next support is software update.

Note: Key_P1 initialization, random, corporate key generation must execute on secure PC.



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Abbrevation list

- PC personal computer;
- CS computer-based system;
- SW software;
- FW firmware;
- RAM random-access memory;
- DET data encryption tool;
- PIN password to access the device;
- OS operating system;
- IS information system;
- Key_P1 digital guardian «Key_P1 MultiClet».



1 General information

1.1 Description and purpose



Figure 1: Digital guardian Key_P1 MultiClet

Key_P1 MultiClet digital guardian (fig. 1) is a multifunctional information system cryptographically protected and containing software and hardware encryption according to GOST 28147-89.

Key_P1 was developed on the basis of Russian multicellular processor with a universal nonvon Neumann architecture. This multifunctional device will secure the data against loss, theft and unauthorized access. Key_P1 has a full set of necessary hardware functions and algorithms of data protection as well as a set of drivers and libraries to use the cryptographic functions. Key_P1 works on PC with Windows XP, Windows 7, Windows 8, Linux 2.6.x, Linux 3.x. (MacOS in terms of SW development).

The basic functionality of Key_P1:

- hierarchical access management to data. There is a possibility to control the users' access rights to the encrypted information (for example between the enterprise departments or according to the types of work (projects);

- synchronized keys management for remote enrypted data exchange in the open channel of data transfer;

- files encryption on the hard disk of the PC or portable data media (USB flash disks, MicroSD, MiniSD, MMC and SD cards);



- divide memory on public and private partition on the mass storage devices (USB flash disks, MicroSD, MiniSD, MMC and SD cards);

- storage of users' passwords and logins in the protected memory of the device. Access to this information is given only after typing the authentication password (PIN). This function makes it possible to protect the password data for access to the open mail resources like mail.ru from unauthorized access;

- prevention of information leak from the corporate computers to portable data media;

- log of the main actions made by the user (the journal describes the events directly connected with the device functionality).

Additional description of Key_P1 features:



Hierarchical access to infor-	The security service of the company will be able to create different rights of the departments
mation	to access to the company information. The head will have access to all files. Employees can
matron	encode files to their colleagues using Key P1 Manager with the appropriate level of access.
Supervise	Information security service of the company can block of recording information from corporate
Supervise	computers on removable drives. Key P1 will block any unauthorized entry of confidential data,
	viruses or other programs on the drive at the hardware level. It will be set the mode "read only".
	Information cannot be written to the drive in this mode, but the user can obtain permission
	from the Information security service to write to the drives.
Protection against spy-	Key_P1 allows connection only conventional data storage devices. Work of the "spy device"
ware flash drives (problem	(presented at the same time keyboard and storage) will be blocked.
badUSB)	
The ban on "off " mode	Key_P1 remains in the "event log " main events performed by the user. Viewing the "event
	log" can be closed for user. Unlock of the viewing is possible by administrator PIN-code. The
	worker is not able to quietly withdraw the device Key_P1 for load corporative data on the flash
	drive. Any attempt to disconnect of Key_P1 will be fixed by the security service.
An employee on a business	Users can create the equal keys to exchange encrypted messages with each other or with the
trip	head office of the company in case of communication during business trips using the open e-mail
	and other Internet resources.
Strong encryption	Encryption of information is possible on the external drives and internal HD of the computer.
	Encryption is performed by algorithm GOST 28147-89 with width of the key 256-bit. This
	algorithm encrypt information on the drive using protected method - by sectors (decryption
	will require thousands of years of computer time).
Data invulnerability	The user has the ability to create backups of encrypted information. In case of loss or damage
	Key P1 and/or storage, the user will be able to recover your information. The device useless
	for the attacker in case of its loss. If the device is lost, it cannot be used for any purpose
	related with encryption and decryption, as well as to retrieve information about the principles
	of operation of similar devices.
Support at multiple drives	The device supports drives of the type SD, micro SD, and USB. You can use an USB extension
	cable, if the size of the landing USB port on the computer is insufficient.
The using of different oper-	The device is supported in the operating systems Windows XP, Windows 7, Windows 8, Linux
ating systems	x, Linux 3.x and after development and renewal of the software MacOS also.
Safe Password	The device allows you to save user passwords and logins on the internal protected memory
	device Key P1. The user can copy username to clipboard of the operating system and paste
	in the appropriate field for login. For password, you can do a similar operation. This ensures
	convenient use and storage of your passwords, as well as protection against key loggers on your
	PC.



1.2 Rules for information protection

To apply the Key_P1 device effectively and to maintain the desired level of protection of the PC and information resources of CS it is necessary to provide the following:

- Key_P1 device safety;
- keeping in secret the device access code (PIN code);

Apart from these measures it is necessary to make a regular routine backup of the encrypted data and encryption keys to have a possibility to recover this information on the new Key_P1 device. For more details of the procedure of the backup and recovery read chapter 2.4 «Device initialization».

DO NOT:

- leave without control the PC which run Key_P1 after inputting PIN code;

- make any changes in the Key_P1 software;
- copy the confidential information without any authorization of the security manager;

- disclose the content of the key data media or give the media to the persons not authorized to use them, present the key data on the screen, print them or present them by any other means of data presentation;

- use the device in the modes not provided for the Key_P1 functionality;
- record the extraneous data on the storages init by Key_P1;

- open the device case.



1.3 System requirements

Before starting to install and adjust the Key_P1 device it is necessary to make sure that your workstation satisfies the minimum system requirements. The requirements are given in table 1.

Table 1. System requirements.

Key_P1 device can be used on any PC	• WindowsXP (SP3);
equipped with the following requirements:	• Windows 7;
	• Windows 8;
	• Linux 2.6.x;
	• Linux 3.x.
Necessary hardware conditions	USB port

1.4 Device mark

Key_P1 device marking applied on the back side of the case.



14 - product release in 2014 year

Figure 2: Device mark



1.5 Technical parameters

Table 2. Technical parameters.

Function	device purpose is
	encrypting middle size of data
Speed	with public partition under 3,2
	${ m Mbit/sec},$
	with private partition and other
	ecnrypting - under 1,2 Mbit/sec
Support USB types	1.1, 2.0, 3.0
Support storages types	USB, SD, microSD, miniSD,
	MMC
Random key max count	1024
Synchro key max count	104
Corporate key max count	512
Corporate key group max count	512
Login and pass list max count	200
Login and pass group max count	32
Event log list max count	1024
Time log list max count	1024
The length of the encryption key	for Key_P1 devices which are on
	sale in the Russian Federation -
	256 bit,
	for Key_P1 devices exported out-
	side of Russian Federation - 56 bit



2 Installation and adjustment of the Key P1

2.1 Brief decription of the installation procedure

As a first step plug Key_P1 Multiclet device to PC USB port, and find at the device connection list (in Windows OS at "My computer") Key_P1 and open it (with double mouse left key click). Open "readme" file. Then click link "Download Software" appropriate to installed OS on PC. Before start Key_P1 Multiclet needed install downloaded application Key_P1 Manager. And accordingly to this user manual necessary with Key_P1 Manager complete following steps:

- 1) Install internal device firmware
- 2) Initialize device
- 3) Initialize storages

Internal firmware installation describe in "Update internal firmware" chapter.

Device initialization contain following steps:

1)Setting 1024 keys

2)Setting administrator PIN code

3)Setting user PIN code

4)Setting alarm PIN code

5)Setting device label

Storages initialization USB and SD types contain following steps:

1)Divided on two partition (public and private)

2)Setting partition labels

Note that number of storages, which can work with Key_P1 device not limited. Key_P1 Manager application not required installation on PC, it means that after device initialization procedure application may be install on removable storage device(enough make copy Key_P1 Software directory). If needed work in OS Windows and OS Linux, that necessary make copy two application versions.



2.2 Software installation

Connect Key_P1 device to USB port of PC. Then device display at the system as removable storage(see example for OS Windows 8 at the picture 3). In the next step open(for exam-

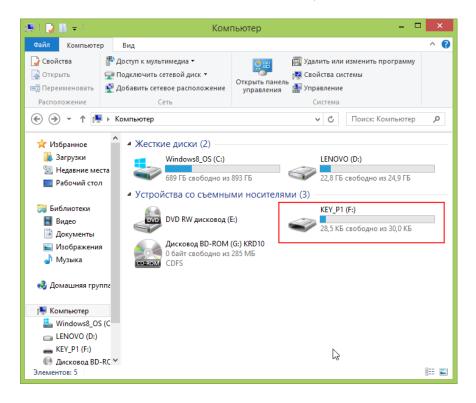


Figure 3: First connection of the Key_P1 MultiClet

ple with double mouse click) removable storage Key_P1 and find readme file with html extension. View of the readme file shown at the picture 4



- I 🗋 🛯	=	KEY_P1 (F:)	(Средства работы с ді	исками		-	□ ×
Файл	Главная	Общий доступ	Вид	Управление				^ ?
Копировать	2	Копироват	ЬВт ≡	✓ Удалить ▼ ∰ Переименовать	Создать папку	Свойства Ф	• Выделить •	
Буфер	о обмена		Упорядочі	ИТЬ	Создать	Открыть		
\odot	· ^ 👝 '	→ Компьютер → К	EY_P1 (F:)		V	С Поис	c: KEY_P1 (F:)	Q
Раб Библ Библ Вид Док Док Изс Муз	рузки давние места бочий стол иотеки цео сументы ображения	readm	e					
	вютер ndows8_OS (0 NOVO (D:) /_P1 (F:)	2						
	сковод BD-R(c ¥						:==

Figure 4: Help readme file on Key_P1 MultiClet

In order to get useful information about software download and available documentation about Key_P1 MultiClet device open(for example with double mouse click) readme file. If you can not open this file with default internet browser, attempt to launch readme file with other installed browser. Readme file content shown at the picture 5



Key_P1 MultiClet

) Подробное описание устройства Key P1 Multiclet				
)(Windows) Загрузить ПО				
)(Linux) Загрузить ПО				
) Форум Key P1 Multiclet				
опросы и пожелания принимаются по электронной почте: sale@multiclet.com, micron@fointec.ru				
) Documents and more information about Key P1 Multiclet				
)(Windows) Download Software				
)(Linux) Download Software				
) Forum Key P1 Multiclet				

Questions and suggestions please email to: sale@multiclet.com, micron@fointec.ru

Figure 5: Readme file content of the Key_P1 MultiClet

Choose link for your OS. For OS Windows click link "(Windows) Download software". If downloading not start click link below:

1)If the PC has an installed OS of Windows family choose the link :

http://multiclet.com/docs/PO/Key_P1/Key_P1_Software_Installer.exe.

2)If the PC has an installed OS of Linux family choose the link :

http://multiclet.com/docs/PO/Key_P1/Key_P1_Software_Installer.tar.gz.

To install the software on the PC start the setup file Key_P1_Software_Installer.exe (OS Windows) or Key_P1_Software_Installer.tar.gz (OS Linux).

The installation wizard will start. Then follow the instructions of the installation wizard. After finishing all the actions the application will be installed on the PC.



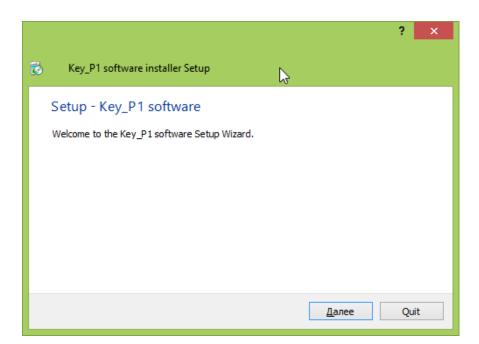


Figure 6: Installation wizard

Installation wizard request installation path. Default path: "C:/Multiclet/Key_P1_software". Window with path request show at picture 7 Click Next button to continue.



	? ×
State Setup € Setu	
Installation Folder	
Please specify the folder where Key_P1 software will be installed.	
C:\Multiclet\Key_P1_software	Browse
N	
2	
<u>Д</u> алее	Отмена

Figure 7: Path request window

Then component choose window will be display. At this moment ready only one option. Click button "Next" to continue. Components choosing window show at the picture 8



	? ×
📀 👸 Key_P1 software installer Setup	
Select Components	
Please select the components you want to install.	
✓ Key_P1_manager	Install Key_P1_manager.
Def <u>a</u> ult <u>S</u> elect All	This component will occupy approximately 50.11 MiB on your hard disk drive.
	Далее Отмена

Figure 8: Components choosing window

In the appeared window click "Install" button to continue installation. Window with installation option shown at the picture 9



	? ×
Key_P1 software installer Setup	
Ready to Install	
Setup is now ready to begin installing Key_P1 software on your computer.	
Show Details	
Ν	
N	
Install	Отмена

Figure 9: Window with installation parameters

After installation finish click Complete button. Finish window shown at the picture 10



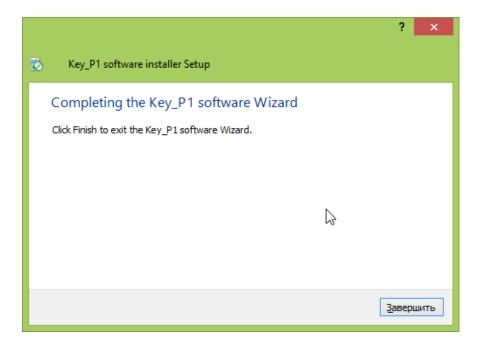


Figure 10: Installation finish



2.3 Key_P1 Manager application start

After installing software package on the PC it is necessary to start Key_P1 Manager application. To do this start the shortcut $Key_P1_Manager.lnk$ located on your PC desktop or start the application in the following way Start-> All programs-> Key_P1 -> Key_P1 Manager.

After starting the application a shortcut Key_P1 Manager (put in a red rectangle) will appear in the right bottom corner of the desktop (in the system tray on the task bar). The icon display in the task bar, as see in fig.11).

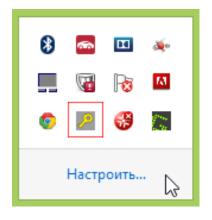


Figure 11: Icon in the system tray

User must have **root** level access for working with Key_P1 device on PC with OS Linux.



2.4 Description of the Key_P1 Manager application interface

The main menu of the Key_P1 Manager application looks like as shown in the fig. 12.

Key_P1 manager				
File Actions Help				
🗗 🔂 🗷 🖱	ق 条 📭 🛋			
Ivano	v I. (manager) 🔻 🚹			
Key_P1 in	formation			
Status:	ready to use			
Device label:	Ivanov I. (manager)			
Last disconnected at:	not defined			
Firmware version:	134			
Read only mode				
USB flash i	nformation			
Status:	not connected			
SD card in	formation			
Status:	connected			
Public disk name/size:	SD_pub / 5.40GBytes			
Private disk name/size:	not mounted			
	TICLET®			

Figure 12: Main menu of the Key_P1 Manager

Menu consists of the following elements::

1) Top bar with tabs File, Actions # Help. The tab File consists of command Close and Exit. Starting the command Close will lead to folding of the application to the tray (the application will stay in the task bar). Starting the command Exit will lead to closing of the application.



The tab Actions includes the following commands: Ecnrypt files, Decrypt files, Quick crypt transformation, Mount private partiton, Unmount private partition, Storage management, Synchro key management, Authentication data storage

The tab Actions contain submenu Administration, which consists of the following: Read only management, Update firmware, Initialize device, Change Key_P1 label, Change administrator PIN, Change user PIN, Change alarm PIN, Corporate key management, Log event. Full description you can find in the next chapters. Content of the tab Actions shown in the fig. 13.

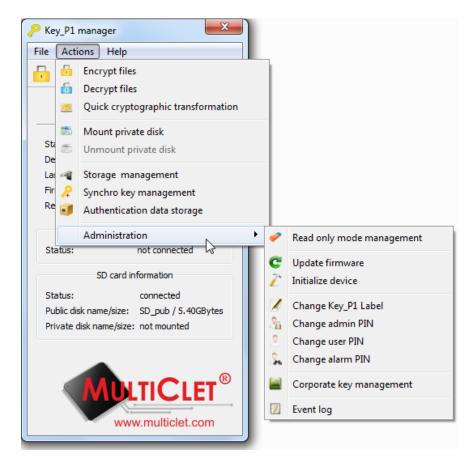


Figure 13: Tab Actions of the Key_P1 Manager

The tab **Help** contain usefull information about working with Key_P1. Content of the tab **Help** shown in the fig. 14.



Key_P1 manager	×
File Actions Help	
🕂 🔓 🤜 😽 Ta	ble of Contents
Ał	oout Key_P1_manager
Ivanov	I. (manager) 🔻 🎦
Key_P1 inf	ormation
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	
USB flash in	formation
Status:	not connected
SD card inf	ormation
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	not mounted
	TICLET® multiclet.com

Figure 14: Tab Help of the Key_P1 Manager

2) Toolbar. Fully duplicates all the commands from the tab **Actions** except submenu **Administration**. Toolbar shown in the fig. 15 and highlighted in red line.



Key_P1 manager	×			
File Actions Help				
🗗 💼 🖂 🖱	ق 条 🛋			
Ivanov I. (manager) 🔻 🔳				
Key_P1 ir	nformation			
Status:	ready to use			
Device label:	Ivanov I. (manager)			
Last disconnected at:	not defined			
Firmware version:	134			
Read only mode				
USB flash information				
Status:	not connected			
SD card information				
Status:	connected			
Public disk name/size:	SD_pub / 5.40GBytes			
Private disk name/size	: not mounted			
	TICLET ® w.multiclet.com			

Figure 15: Toolbar of the Key_P1 Manager

3) Drop-down list of the attached devices of Key_P1. All the attached devices with the label display in this list. In the fig. 16 this list highlighted in red line.



Key_P1 manage	r X		
File Actions H	lelp		
🗗 💼 🖂	🍮 🛋 🚑 🥑		
Ivanov I. (manager) 🔻			
Key	_P1 information		
Status:	ready to use		
Device label:	Ivanov I. (manager)		
Last disconnected at: not defined			
Firmware version:	: 134		
Read only mode			
USB flash information			
Status:	not connected		
SD card information			
Status:	connected		
Public disk name/s	size: SD_pub / 5.40GBytes		
Private disk name	size: not mounted		
	www.multiclet.com		

Figure 16: List of attached devices Key_P1 $\,$

4) Button Unlock user PIN code shown in the fig. 17 and highlighted in red line.



Key_P1 manager	×			
File Actions Help				
🗗 💼 🖂 🖾	ق 🚑 剩			
Ivanov I. (manager) 🔻				
Key_P1 in	formation			
Status:	ready to use			
Device label:	Ivanov I. (manager)			
Last disconnected at:	not defined			
Firmware version:	134			
Read only mode				
USB flash information				
Status:	not connected			
SD card information				
Status:	connected			
Public disk name/size:	SD_pub / 5.40GBytes			
Private disk name/size:	not mounted			
	TICLET ®			

Figure 17: Button unlock user PIN code

5) Area Information about Key_P1. This area contain Device status, Device label (name), Last disconnection time, Firmware version, Read only mode.

6) Area Information about USB storage. This area contain Device status, Label/size public partition, Label/size private partition

7) Area Information about SD card. This area contain Device status, Label/size public partition, Label/size private partition



2.5 Device firmware update

Update firmware (update FM) necessary make regulary, bacause ever new FM version improve Key_P1 Manager application and make work with it more stable and functionality.

Start application Key_P1 Manager. Connect Key_P1 Multiclet device at the first time to PC and pop up message with request to install firmware as shown at the fig. 18. And press button "Yes" to continue. Update firmware and install firmware are identical procedures.



Figure 18: Firmware install

In order to make update FM manually necessary at the main application menu choose tab **Actions** go to submenu **Administration** and select **Update firmware** item (fig. 19).



P Key_P	l manager	-)	
File Ac	tions Help		
🔒 🙃	Encrypt files		
6	Decrypt files		
	Quick cryptographic transformation		
	Mount private disk		
Sta 👝 De	Unmount private disk		
La: 🐗	Storage management		
Fir 🔑	Synchro key management		
Re 🥑	Authentication data storage		
	Administration •	1	Read only mode management
Status	not connected	C	Update firmware
	SD card information	22	Initialize device
Status	connected		
Public o	Public disk name/size: SD_pub / 5.40GBytes		Change Key_P1 Label
Private disk name/size: not mounted		2	Change admin PIN
		2	Change user PIN
		2	Change alarm PIN
			Corporate key management
			Event log
	www.multiclet.com		-

Figure 19: Firmware update

The window **Key_P1 update wizard** will be display (fig. 20). Press button «Next» to continue. Press button «Cancel» to abort update procedure.



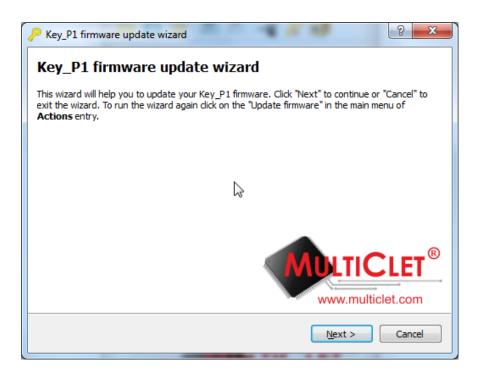


Figure 20: Firmware update wizard Key_P1

Next window - choice firmware update source. There are two options: from web-site http: //multiclet.com or from file (fig. 21).

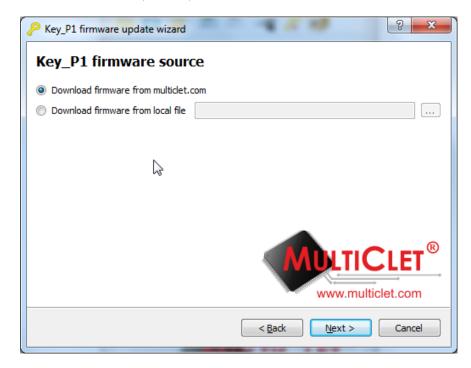


Figure 21: FM update source

As a default update from web-site http://multiclet.com and for it's way PC must be



connect to Internet. Application connect to web-site and display **Firmware list** (fig. 22) with all firmware versions available to install. Choose appropriate firmware version and press button «Next».

Date	Version	Firmware	1
07.10.2014	134	KeyP1_FW_134.bin	=
07.10.2014	134	KeyP1_Release_FW_134.bin	
07.10.2014	132	KeyP1_FW_132.bin	
07.10.2014	132	KeyP1 Release FW 132.bin	

Figure 22: Key_P1 firmware list

If needed update FM from local file that necessary choose **Download firmware from local** file (fig. 23).



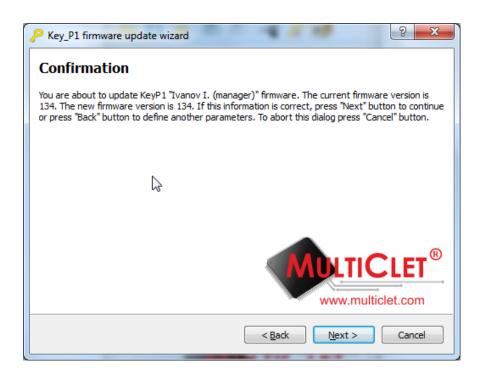


Figure 23: Downloading firmware from local file

Then necessary set file path (fig. 24).

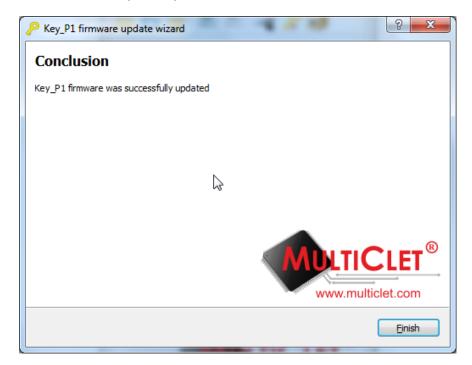


Figure 24: Updating firmware from local file

Enter administrator PIN and press button «OK» to continue update procedure. Update process will start after it.

www.multiclet.com



2.6 Device initialization

The following stage is to make device initialization. After start application Key_P1 Manager necessary connect Key_P1 Multiclet device to PC. Message about device initialization will be pop up(if device not initialized), see fig.25. Press "Yes" button to continue.



Figure 25: Start initialization Key_P1 device

Initialization wizard will be start, as see in fig.26. Also initialization wizard can be start manually, to do this in the main menu necessary select tab **Actions**, choose submenu **Administration** and select **Initialize device** item.



Figure 26: Initialization wizard of the Key_P1 $\,$

Press "Next" button to continue procedure. Press "Cancel" to abort procedure.



🤑 Key_P1 initializati	on wizard
Cryptograph	ic keys for Key_P1
generate cryptog	raphic keys
save to file	
load cryptograph	c keys from file
	MULTICLET®
	www.multiclet.com
	< Back Next > Cancel

Figure 27: Key_P1 initialiation options

At the first stage of the device initialization necessary set initialization options (fig. 27).



Figure 28: Key_P1 set initialization options

Initially necessary to set checkbox at the string **generate cryptographic keys**. As a default all keys will be save in the internal memory of the Key_P1 device, but there is a way



to make keys backup. In case Key_P1 device loss will be a way to recover cryptographic keys and transfer keys on a new device Key_P1. To do this set checkbox **Save in file** and choose file path(button highlighted in red in fig. 28). After choosing path for saving file press button "Save"(fig. 29).

P Save file	large for Key, P1	×	
G 🖉 🕨 kp	-test 👻 47	Поиск: kp1-test 🖇	2
Упорядочить 🔻	Новая папка	:= - 👔	
📃 Рабочий стол	^ Имя	Дата изменения Тип	
詞 Библиотеки	list_key	9/30/2014 4:53 PM Файл	
 iminian iminian	E		
🐏 Компьютер 🏭 Локальный д 🞯 DVD RW диск 🚳 Дисковод BD	авс		Þ
<u>И</u> мя файла:	list_key	•	-
<u>Т</u> ип файла:			•
🔿 Скрыть папки		Сохранить Отмена	.41

Figure 29: File path for keys backup

If necessary use previously saved key list, that set checkbox at the field **download cryp-tographic keys from file**, to do this press button, which highlighted in red (fig. 30) and choose previously saved file.





Figure 30: Setting file path to previously saved key list

Press button "Next" to continue procedure and press "Cancel" to abort procedure. At the window **administrator PIN** that appeared (fig. 31) necessary set administrator PIN (when devices using in the company the setting of the administrator PIN, alarm PIN and initially user PIN is a prerogative of security service manager) and press «Next». Minimal characters count - 4, Maximal characters count - 16, uppercase and lowercase character differ.

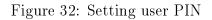


lmini														
					Admin	istrator	PIN •	•••						
			Ad	lministra	tor PIN o	onfirma	tion 🔸							
•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp
Tab	q	w	e	r	t	у	u	i	o	р	[]	/	Clr
Ca	ps	a	s	d	f	g	h	j	k	1	;		Enter	
	🗆 Shift		z	x	с	v	b	n	m	,	$\overline{\cdot}$		Shift 🗆	
											N	LTI		LET
											COLOR W	ww.m	ulticle	t.com

Figure 31: Setting administrator PIN

At the window **user PIN** that appeared (fig. 32) necessary set user PIN and press «Next». Minimal characters count - 4, Maximal characters count - 16, uppercase and lowercase character differ.

						User	PIN •	•••					
				U	ser PIN (confirma	ition 😐	•••					
•	0	1	2	3	4	5	6	7	8	9	-	=	Bksp
Tab	q	w	e	r	t	У	u	i	0	p	[]	/ Clr
Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter
	🗆 Shift		z	x	c	v	Ь	n	m	,	•		Shift 🗆
											ΜŲ	LTI	





At the window **alarm PIN** (fig. 33) necessary set alarm PIN and press «Next». Using alarm PIN necessary to immediate clear all keys and data from Key_P1 device. Alarm PIN doesn't match with user PIN. In case matching alarm PIN not trigger. Minimal characters count - 4, Maximal characters count - 16, uppercase and lowercase character differ.

Note: during initialization device procedure there is a way to skip setting alarm PIN code. To do this necessary leave the fields empty and press button "Next". Thus alarm PIN will be not set.



Figure 33: Setting alarm PIN

Next step is setting device label (fig. 34). Maximal characters count - 128. As device label might use First name or Last user name or any combination with department. For example «Ivanov Ivan» or «Ivanov I.(manager)»



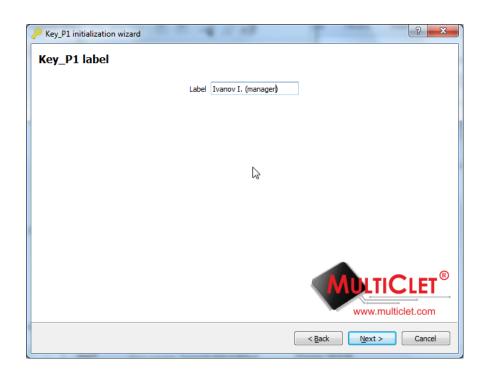


Figure 34: Setting device label

Necessary to check initialize options (fig. 35) and press button «Next».



Figure 35: Initialization options

Initialization process will be start and after it's complete necessary press button «Finish» (fig. 36).



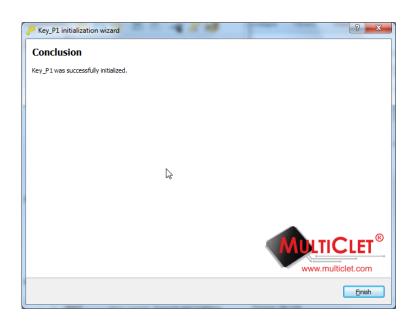


Figure 36: Initialization complete

Key_P1 device initialization is complete. In the main menu device will be display with their label (name): «Ivanov I.» (fig. 37).



Key_P1 manager	×
File Actions Help	
🗗 🔂 🖂 😂	ق 🐥 🛋 🛋
Ivano	v I. (manager) 🔻 🚹
Key_P1 in	formation
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	
USB flash i	nformation
Status:	not connected
SD card in	formation
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	not mounted
	TICLET ® w.multiclet.com

Figure 37: Application main menu after initialization process



2.7 Changing administrator PIN

To do this changing administrator PIN code operation should be choose tab **Actions** go to submenu **Administration** and choose **Change administrator PIN** submenu item (fig. 38)

🤑 Ke	y_P1	manager		x	1
File	Act	ions Help			
-	- - - -	Encrypt files Decrypt files Quick cryptogr	aphic transformation	-	
De		Mount private o Unmount privat	te disk		
Fin	<+	Storage manag Synchro key ma	·		
Re	•	Authentication	data storage		
		Administration		+ 🧈	Read only mode management
Sta	atus:	SD card ir	not connected	C Z	Update firmware Initialize device
	atus: blic di	sk name/size:	connected SD_pub / 5.40GBytes	1	Change Key_P1 Label
Pri	vate (disk name/size:	not mounted	2	Change admin PIN
				<u></u> %	Change user PIN Change alarm PIN
			LTICLE	® 🔛	Corporate key management
		a series	www.multiclet.com	<u></u>	Event log
	_				

Figure 38: Change administrator PIN item

At the window appeared (fig. 39) necessary type administrator PIN into **Current administrator PIN** field and type new administrator PIN into **New administrator PIN** field and **Confirmation new administrator PIN** field. After these actions press button «OK» to save changes. Maximal attempt count PIN - 10, in case 10 not success attempts, administrator PIN will be locked. In administrator lock case necessary erase all data with special utility and make new device initialization procedure (Initialization procedure described in chapter 2.4).



<u></u>	lulticlet	® Key_	P1: Ivar	nov I. (m	nanager)	-				-				? <mark>x</mark>	
					_											
						nt admir										
					Ne	ew admin	istrator	PIN								
				New ad	lministra	tor PIN (confirma	tion								
							OK		Cancel							
				3			UK.		Cancer							
	•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp	
	Tab	q	w	e	r	t	У	u	i	0	р	[]	1	Clr	
	Ca	ps	a	s	d	f	g	h	j	k	1	;		Enter		
		🗆 Shift		z	x	c	v	b	n	m	,	•		Shift 🗆		

Figure 39: Changing administrator PIN



2.8 Changing user PIN

To do this changing user PIN code operation should be choose tab **Actions** go to submenu **Administration** and choose **Change user PIN** submenu item (fig. 40)

₽ Key File		manager ons Help	×		
Sta De Lat Fin		Encrypt files Decrypt files Quick cryptographic tra Mount private disk Unmount private disk Storage management Synchro key managem Authentication data sto	ent	-	
Sta	itus:	Administration not con SD card information		 ✓ ✓ ✓ ✓ ✓ 	Read only mode management Update firmware Initialize device
Pub		connect sk name/size: SD_pub disk name/size: not mou	/ 5.40GBytes	8 24 2	Change Key_P1 Label Change admin PIN Change user PIN
		WWW.m	ICLET [®]		Change alarm PIN Corporate key management Event log

Figure 40: Change user PIN item

At the window appeared into **Choose login** field necessary select PIN code with which will be change user PIN. This action can be make with user PIN or with administrator PIN.

1) Using user PIN (fig. 41). Necessary choose "user" into **Login** field. Type current user PIN into **Current user PIN** field and type new user PIN into **New user PIN** field and **Confirmation new user PIN** field. And press button «OK» to save changes. Maximal attempt count user PIN - 10, in case 10 not success attempts, user PIN will be locked. In order to unlock use administrator PIN code.

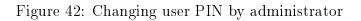


2 N	Aulticlet	® Key_	P1: Ivan	iov I. (m	anager)			4	2.8				e G	x
							Lo	ogin us	er	•					
						Curre	ent user	PIN							
						Ne	ew user	PIN							
					New us	ser PIN o	onfirma	tion							
							OK		2 Cancel						
	Ì	0	1	2	3	4	5	6	7	8	9	-	=	Bksp	
	Tab	q	w	e	r	t	У	u	i	•	р	[]	1	Clr
	Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter	
		🗆 Shift		z	x	c	v	Ь	n	m	,	•		Shift 🗆	

Figure 41: Changing user PIN by user

2) Using administrator PIN (fig. 42). Necessary choose "administrator" into Login field. Type current administrator PIN into Current administrator PIN field, and type new user PIN into New user PIN field and Confirmation new user PIN field. And press button «OK» to save changes. Maximal attempt count user PIN - 10, in case 10 not success attempts, user PIN will be locked.

🥍 N	Aulticlet	® Key_	P1: Ivar	nov I. (m	anager)			4	2.8				8	x
						nt admin Ne ser PIN (nistrator ew user	PIN PIN	ministra	tor 🔻	Ĺ	6			
							OK		Cancel						
	•	0	1	2	3	4	5	6	7	8	9	-	=	Bksp	
	Tab	q	w	e	r	t	У	u	i	0	р	[]	/ Clr	
	Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter	
		🗆 Shift		z	x	с	v	ь	n	m	,	•		Shift 🗆	





2.9 Changing alarm PIN

In order to change alarm PIN necessary choose tab Avtions go to submenu Administration and select Change alarm PIN item (fig. 43)



Figure 43: Changing alarm PIN

At the window appeared (fig. pinalarm2) necessary type current user PIN into **user PIN** and type new alarm PIN into **Alarm PIN** and **Confirmation alarm PIN**. And press button «OK» to save changes.



<mark>Р</mark> М	ulticlet	® Key_	P1: Ivan	iov I. (m	anager)	-								? <mark>x</mark>	
							User	PIN								
							Alarm	PIN								
					Ala	rm PIN o	confirma	tion								
				3			OK		Canaal							
							OK		Cancel							
	•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp	
	Tab	q	w	e	r	t	У	u	i	0	р	[]	1	Clr	
	Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter		
		🗆 Shift		z	x	c	v	ь	n	m	,	•		Shift 🗆		

Figure 44: Changing alarm PIN



2.10 Changing device label

In order to change device label (name) necessary choose tab **Actions** go to submenu **Administration** and choose **Change Key_P1 label** item (fig. 45). This operation can be performed only with administrator PIN.

🤑 Ke	y_P1	manager			
File	Act	ions Help			
-	6 6	Encrypt files Decrypt files			
			aphic transformation		
Sta	(a) (a)	Mount private Unmount priva			
	4 	Storage manage Synchro key m Authentication	anagement		
st	atus:	Administration	2	-	Read only mode management
		SD card i	nformation	C Z	Update firmware Initialize device
	atus: blic di	sk name/size:	connected SD_pub / 5.40GBytes	1	Change Key_P1 Label
Pri	vate	disk name/size:	not mounted	4	Change admin PIN Change user PIN
				3	Change alarm PIN
			LTICLET	۵ 🔛	Corporate key management
			www.multiclet.com	7	Event log
			www.multiciet.com		

Figure 45: Changing device label

At the window appeared into **Device label** field (fig. 46) necessary type new device label (name) and press button «OK».

P Key_P1_manager
Label Ivanov I. (manager)
OK Cancel

Figure 46: Changing device label



Type current administrator PIN into **administrator PIN** field (fig. 47) and press button «OK».

P Mul	lticlet	® Key_	P1: Ivar	nov I. (m	anager)		ei			1.3				?	x
						Admin	istrator	PIN 🔸	••							
							OK		Cancel							
	`	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp	
	Tab	q	w	e	r	t	У	u	i	•	р	[]	/	Clr	
	Ca	ps	a	s	d	f	g	h	j	k	1	;		Enter		
		□ Shift		z	x	c	v	ь	n	m	,	•		Shift 🗆		

Figure 47: Type administrator PIN

If all actions completed success that in main application menu into **Device label** field will be display new device label.



3 Using Key_P1 device

3.1 Storage management

3.1.1 Create a private partition on the USB storage

In order to make a private partition (protected and crypt) on the USB storage necessary choose tab **Actions** and choose **Storage management** item (fig. 48).

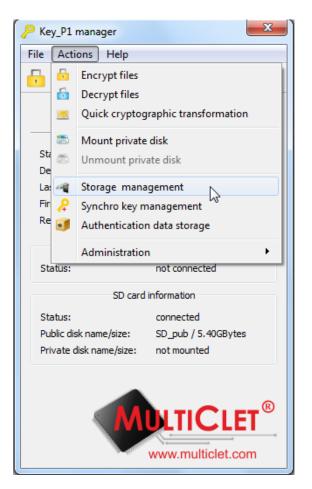


Figure 48: Storage management

At the window Storage management (fig. 49) necessary choose «USB storage» into Storage field, at the line Actions choose «Initialize storage», at the field Public partition label type name for public partition, at the field Public partition size set size of a public partition, at the field Private partition label type name for private partition, at the field Private partition size set size of a private partition. And press button «OK» to continue(fig. 49).

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P Storage mana	ging ? X
Storage	USB flash 🔹
Action	Initialize storage 🔹
Public disk label	USB_pub
Public disk size	5337 MB 🚔
Private disk label	USB_priv
Private disk size	2048 MB 🍨 👘
Ок	Cancel

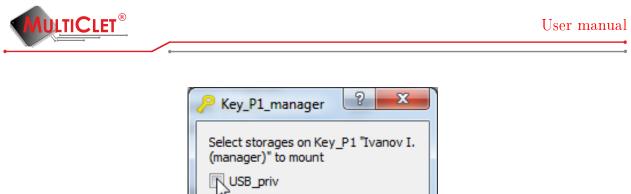
Figure 49: Storage initialization

Window for entering user PIN will display. After entering user PIN code press button «OK» (fig. 50).

P Mu	ulticlet	® Key_l	P1: Ivan	ov I. (m	anager)				4.	1		1	l	?	x
							User	PIN 🔸	••							
OK Cancel																
								- 								1
	•	0	1	2	3	4	5	6	7	8	9	-	= Bksp			
	Tab	q	w	e	r	t	У	u	i	•	р	[]	/	Clr	
	Cap	os	a	s	d	f	g	h	j	k	I	;		Enter		
	1	□ Shift		z	x	c	v	ь	n	m	,	•		Shift 🗆		ĺ

Figure 50: Entering user PIN

Window appeared with request mount private partition (fig. 51). Set checkbox appropriate private partition, which necessary mount and press button «OK».



Select storages on Key_P1 "Ivanov I. (manager)" to mount USB_priv SD_priv OK Cancel

Figure 51: Mounting private partition

Window for entering user PIN will display. After entering user PIN code press button «OK» (fig. 52).

						User	PIN 이	••						
						ОК	2	Cancel						
•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp
Tab	q	w	e	r	t	У	u	i	0	p	[[]	Clr
Ca	aps	a	s	d	f	g	h	j	k	-	;		Enter	
	□ Shift		z	x	с	v	Ь	n	m	,	•		Shift 🗆	

Figure 52: Entering user PIN

After these actions completed in the field **Information about USB storage** will be display information about mount partitions. In the OS private partition display at the list of removable drive53.



Key_P1 manager	x
File Actions Help	
🔓 🔓 🖂 🖏	5 ୶ 🔑 🧃
Ivanov I. (manage	r) 🔻 💼
Key_P1	information
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	
USB flash	ninformation
Status:	connected
Public disk name/size:	USB_pub / 5.21GBytes
Private disk name/size:	USB_priv / 2.00GBytes
SD card	information
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	not mounted
	DLTICLET®
	www.multiclet.com

Figure 53: Application main menu

In order to make partition label changing or format private partition necessary consequentially choose tab Actions go to submenu Administration and choose Storage management item. In the window Storage management choose «USB storage» in the Storage field, at the string Actions choose appropriate action with storage. Then make all necessary changes.



3.1.2 Create a private partition on SD card

In order to make a private partition (protected and crypt) on the USB storage necessary choose tab **Actions** and choose **Storage management** item (fig. 54).

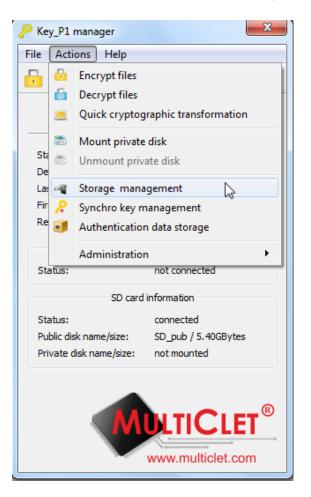


Figure 54: Storage management

At the window **Storage management** (fig. 55) necessary choose «SD storage» into **Storage** field, in the field **Actions** choose «Initialize storage», in the field **Public partition label** type name of public partition, in the field **Size of public partition** set size of public partition, in the field **Private partition label** type name of private partition, in the field **Size of private partition** set size of private partition. After all actions completed press button «OK».



🔑 Storage mana	ging ? X
Storage	SD card 🔻
Action	Initialize storage 🔹
Public disk label	SD_pub
Public disk size	5532 MB 🍨
Private disk label	SD_priv
Private disk size	2048 MB 🍨 👘
OK	Cancel

Figure 55: Storage initialization

Window contain entering user PIN code appeared. Press button «OK» to continue (fig. 56).

🔑 Mu	lticlet	® Key_	P1: Ivar	nov I. (m	nanager)	-	-	-	ч.	1.10	·	-		? <mark>x</mark>	-
							User	PIN 이	•••							
							OK		Cancel							
	•	0	1	2	3	4	5	6	7	8	9	-	=	Bks	p	
	Tab	q	w	e	r	t	У	u	i	0	р	[]	1	Clr	
	Ca	ps	a	s	d	f	g	h	j	k		;		Enter		
		□ Shift		z	x	c	v	ь	n	m	,	•		Shift 🗆		

Figure 56: Entering user PIN

Window appeared with request mount private partition (fig. 57). Set checkbox appropriate private partition, which necessary mount and press button «OK».





Key_P1_manag	er ? X
Select storages on (manager)" to mou	
USB_priv	
SD_priv	l≥
ОК	Cancel

Figure 57: Mounting private partition

Window for entering user PIN will display. After entering user PIN code press button «OK» (fig. 58).

						User	PIN 이	••						
						ОК		Cancel						
										2				
	0	1	2	3	4	5	6	7	8	9	-	=	= Bksp	
Tab	q	w	e	r	t	У	u	i	•	p	[]	1	Clr
С	aps	a	s	d	f	g	h	j	k		;		Enter	
	□ Shift		z	x	c	v	Ь	n	m	,			Shift 🗆	

Figure 58: Entering user PIN

After these actions completed in the field **Information about SD card** will be display information about mount partitions. In the OS private partition display at the list of removable drive(fig. 59).



Key_P1 manager	×
File Actions Help	
🗗 🔂 🖾 🖱	🗊 옦 ୶
Ivan	ov I. (manager) 🔻 🔒
Key_P1 ir	nformation
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	
USB flash i	information
Status:	connected
Public disk name/size:	USB_pub / 5.21GBytes
Private disk name/size:	not mounted
SD card ir	nformation
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	SD_priv / 2.00GBytes
	LTICLET®

Figure 59: Application main menu

In order to make partition label changing or format private partition necessary consequentially choose tab Actions go to submenu Administration and choose Storage management item. In the window Storage management choose «SD card» in the Storage field, at the string Actions choose appropriate action with storage. Then make all necessary changes.



3.1.3 Mounting private partition on the USB storage

In order to make mounting procedure of previously created private partition on the USB storage necessary consequentially choose tab **Actions** and command **Mount private partition** (fig. 60).

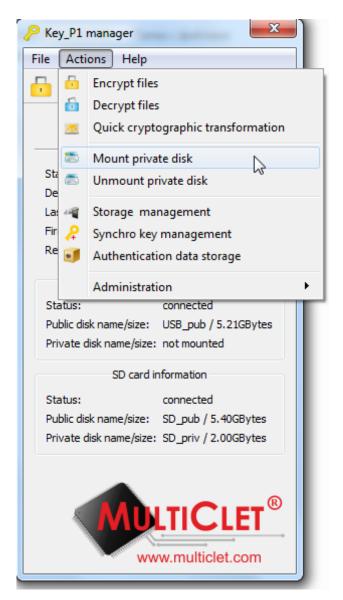
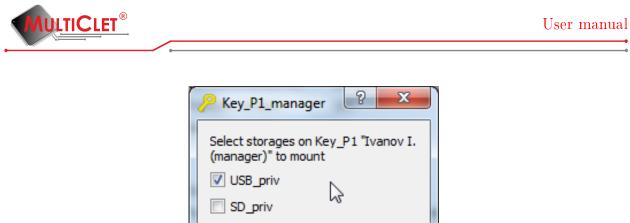


Figure 60: Mounting private partition

Set checkbox appropriate private partition, which necessary mount and press button «OK». (fig. 61).



OK Cancel

Figure 61: Storage choice

Window for entering user PIN will display. After entering user PIN code press button «OK» (fig. 62).

						User		••					
						ОК		Cancel					
•	0	1	2	3	4	5	6	7	8	9	-	=	Bksp
Tab	q	w	e	r	t	У	u	i	0	p	[]	/ Clr
C	aps	a	s	d	f	g	h	j	k	I	;		Enter
	□ Shift		z	x	с	v	ь	n	m	,	•		Shift 🗆

Figure 62: Entering user PIN

Application main menu will be look like as shown at fig. 63



Key_P1 manager	×
File Actions Help	
🗗 🔂 🖂 🖾	ال 条 🚁 🛋
Ivan	ov I. (manager) 🔻 🔒
Key_P1 ir	nformation
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	
USB flash	information
Status:	connected
Public disk name/size:	USB_pub / 5.21GBytes
Private disk name/size:	USB_priv / 2.00GBytes
SD card in	nformation
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	not mounted
	LTICLET [®]

Figure 63: Application main menu



3.1.4 Mounting private partition on the SD card

In order to make mounting procedure of previously created private partition on the SD card necessary consequentially choose tab **Actions** and command **Mount private partition** (fig. 64).

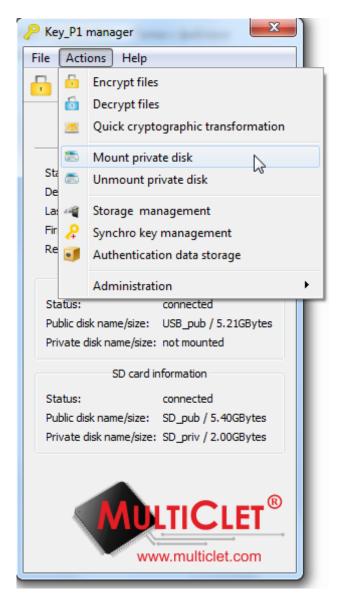


Figure 64: Mounting private partition

Set checkbox appropriate private partition, which necessary mount and press button «OK» (fig. 65).



Key_P1_manager
Select storages on Key_P1 "Ivanov I. (manager)" to mount
✓ USB_priv: already mounted
SD_priv
OK Cancel

Figure 65: Storage choice

Set checkbox appropriate private partition, which necessary mount and press button «OK» (fig. 66).

Multiclet	® Key_	P1: Ivar	nov I. (m	nanager)	-							l	?
	User PIN													
						ОК		Cancel						
•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp
Tab	q	w	e	r	t	У	u	i	0	р	[]	1	Clr
Ca	ps	a	s	d	f	g	h	j	k	1	;		Enter	
	□ Shift		z	×	c	v	ь	n	m	,	•		Shift 🗆	

Figure 66: Entering user PIN

Application main menu will be look likes as shown at fig. 67



Key_P1 manager	X
File Actions Help	
🗗 🙆 🖂 📼	🗊 옦 ୶
Ivan	ov I. (manager) 🔻 🔒
Key_P1 ir	nformation
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	
USB flash i	information
Status:	connected
Public disk name/size:	USB_pub / 5.21GBytes
Private disk name/size:	USB_priv / 2.00GBytes
SD card ir	nformation
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	SD_priv / 2.00GBytes
	w.multiclet.com

Figure 67: Application main menu



3.1.5 Unmounting private partition

In order to make unmounting procedure of previously created private partition necessary consequentially choose tab **Actions** and command **Unmount private partition** (fig. 68).

🤑 Ke	y_P1	manager 🛛 📉
File	Acti	ons Help
	-	Encrypt files
_	6	Decrypt files
		Quick cryptographic transformation
	5	
Sta De		Unmount private disk
La	a a	Storage management
Fin	<mark>,</mark>	Synchro key management
Re		Authentication data storage
		Administration
	atus:	connected
		sk name/size: USB_pub / 5.21GBytes
Pri	vate d	disk name/size: USB_priv / 2.00GBytes
		SD card information
Sta	atus:	connected
Pu	blic dis	sk name/size: SD_pub / 5.40GBytes
Pri	vate d	lisk name/size: SD_priv / 2.00GBytes
		MULTICLET www.multiclet.com

Figure 68: Unmounting private partition

Set checkbox appropriate private partition, which necessary mount and press button «OK» (fig. 69).

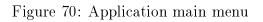


Key_P1_manager
Select storages on Key_P1 "Ivanov I. (manager)" to unmount
USB_priv
🔽 SD_priv
OK Cancel

Figure 69: Storage choice

Application main menu will be look likes as shown at fig. 70

Key_P1 manager	X
File Actions Help	
🗗 🔂 🖂 🖱	ق 条 🛋 🛋
Ivan	ov I. (manager) 🔻 🚹
Key_P1 ir	nformation
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	
USB flash	information
Status:	connected
Public disk name/size:	USB_pub / 5.21GBytes
Private disk name/size:	not mounted
SD card ir	nformation
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	not mounted
	LTICLET®
ww	w.multiclet.com





3.1.6 Using private partition

Private partition is intended to store information in an encrypted form. In order to encrypt information necessary make usual operation "copy" to private partition. This operation can be performed with command «Copy» on OS or with drag and drop system (fig. 51).

O ▼	- E X		- E X
Упорядочить 👻 🥘 Открыть	Копирование 1 элем. (1,27 MБ)		
 Недавние места Имя Рабочий стол Библиотеки Видео 	Копирование 1 элем. (1,27 из 2 (С:\2) на Съемный диск (G: Обнаружено: 1 элем. (1,27 МБ)		 Дата измен Эта папка пуста.
 Документы Изображения Музыка 	✓ Подробнее	Отмена	
 Домашняя групп. Компьютер System (C:) 		— Съемный диск (Съемный диск (☐ ↓ Сеть	
Swap (D:)			
SecDoc Текстовый документ		Элементов: 0	

Figure 71: Copying information on private partition

This procedure identical for private partition, created on the USB storage, and for private partition, created on the SD card.

In order to decrypt files from private partition enough copy file from private partition to any available memory of file system.



3.2 Synchro key management

Synchro key is intended that users can create identical keys to exchange encrypted messages between users and main company office in case exchange confidential data during business trip by email and other internet sources.

3.2.1 Synchro key adding

Before start creating synchro keys, users, who plan transfer encrypted information, necessary to make exchange between themselves following parameters in order to create synchro key: algorithm number (the first, the second or the third) and key sentence (initial value or phrase) that generate identical keys for ever user.

In order to perform synchro key creating procedure necessary consequentially choose tab **Actions** and submenu item **Synchro key management** (fig. 72).



_		manager
File	Acti	ons Help
	6	Encrypt files
	6	Decrypt files
		Quick cryptographic transformation
	-	······································
Sta De	8	Unmount private disk
	a a	Storage management
Fin	(+-)	Synchro key management
Re	•	Authentication data storage
		Administration
St	atus:	not connected
		SD card information
St	atus:	connected
Pu	iblic dis	sk name/size: SD_pub / 5.40GBytes
Pri	ivate d	lisk name/size: not mounted
		WOLTICLET® www.multiclet.com

Figure 72: Synchro key management

Window for entering user PIN will be display. After enter user PIN press button «OK» (fig. 73).



						User	PIN						
						OK		Cancel			[de la	
•	0	1	2	3	4	5	6	7	8	9	-	=	Bksp
Tab	q	w	e	r	t	У	u	i	0	p	[]	/ Clr
Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter
	□ Shift		z	x	с	v	ь	n	m	,			Shift 🗆

Figure 73: Entering user PIN

At the window Synchro key management (fig. 74) necessary press button «Add».

Synchro key manager	×
Label	Add
	Delete
	Delete all

Figure 74: Synchro key management

At the window **Synchro key adding** (fig. 75) necessary set **Algorithm**, at the **Label** field type description of the key, at the **Key sentence** and **Confirmation key sentence** fields necessary type word or phrase for creating key. After all actions press button «OK».



Synchro key a	dding	-						_	_			8 2
			Algorith	m		Fire	st		•			
	Label						siness tr	ip				
	Key sentence ••••											
			Key ser	ntence o	onfirmat	tion 🔸	••				C	2
					OK		Cancel				ч	٥
• 0	1	2	3	4	5	6	7	8	9	-	=	Bksp
Tab q	w	e	r	t	У	u	i	•	p	[]	/ Clr
Caps	a	s	d	f	g	h	j	k		;		Enter
□ Shift		z	x	с	v	ь	n	m	,	•		Shift 🗆

Figure 75: Synchro key adding

Window for entering user PIN will be display. After enter user PIN press button «OK» (fig. 76).

/ <mark>/</mark> N	lulticlet	® Key_	P1: Ivan	iov I. (m	nanager)								2	x
							User	PIN 이	•••						
							ОК		Cancel						
	•	0	1	2	3	4	5	6	7	8	9	-	=	Bksp	
	Tab	q	w	e	r	t	У	u	i	0	p	[]	/ Clr	
	Ca	ips	a	s	d	f	g	h	j	k	I	;		Enter	
		🗆 Shift		z	x	c	v	ь	n	m	,	•		Shift 🗆	

Figure 76: Entering user PIN

After all actions performed, at the window **Synchro key management** (fig. 77) will be display information about synchro key.



Label		Add
Business trip		Delete
	\searrow	Delete all

Figure 77: Synchro key management



3.2.2 Synchro key deleting

In order to perform synchro key deleting procedure necessary consequentially choose tab **Actions** and choose **Synchro key management** item (fig. 78).

P Key_P1 manager		
File Actions Help		
-	6	Encrypt files
<u> </u>	6	Decrypt files
	×	Quick cryptographic transformation
-	-	Mount private disk
De	8	Unmount private disk
La	a 🍯	Storage management
Fin	« +	Synchro key management
Re	•	Authentication data storage
		Administration
St	atus:	not connected
SD card information		
Status: connected		
Public disk name/size: SD_pub / 5.40GBytes		
Private disk name/size: not mounted		
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Figure 78: Synchro key management

Window for entering user PIN will be display. After enter user PIN press button «OK» (fig. 79).



P Synchro key manager	×
Label	Add
Business trip	Delete
	Delete all

Figure 79: Entering user PIN

At the window **Synchro key management** (fig. 80) necessary select key list, which user want to remove and press button «Delete». If require remove all key list that press button «Delete all».

						User	PIN							
						OK		Cancel						
											[de la		
	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp
Tab	q	w	e	r	t	У	u	i	0	р]]	1	Clr
	Caps	a	s	d	f	g	h	j	k	1	;		Enter	
□ Shift		z	×	c	v	ь	n	m	,			Shift 🗆		

Figure 80: Synchro key deleting

Window with request on confirmation about deleting will be display. Press button «Yes» to complete operation (fig. 81).

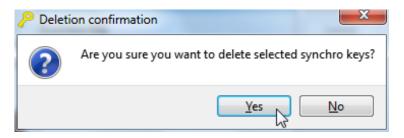


Figure 81: Key deleting



Window for entering user PIN will be display. After enter user PIN press button «OK» (fig. 82).

<mark>Р</mark> Мі	ulticlet	® Key_	P1: Ivan	iov I. (m	nanager)									8	X
	User PIN ••••															
	OK Cancel															
l r																1
	`	0	1	2	3	4	5	6	7	8	9	•	=	Bk	sp	
	Tab	q	w	e	r	t	У	u	i	•	P	[]	/	Clr	
	Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter		
	□ Shift		z	x	с	v	ь	n	m	,	•		Shift 🗆			
																,

Figure 82: Entering user PIN



3.3 Files encryption

Files encryption on the Key_P1 device performed following ways:

1) automatically when copying files to private partition of the initialized storage: in this case files at the storage will be encrypted by sector group with some keys from 1024 created in during device initialization procedure.

2) One of cryptographical method from field "Files encrypting": in this case files encrypting may be perform one of three methods:

- **random key** (some keys from 1024 keys, install on initialization procedure, one's file parts can be encrypted 1024 keys)

- **synchro key** (with one synchro key)

- corporate key (one key from some amount keys intended for corporate group)

In order to perform files encrypted procedure necessary consequentially choose tab Actions and Files encrypt(fig. 83).



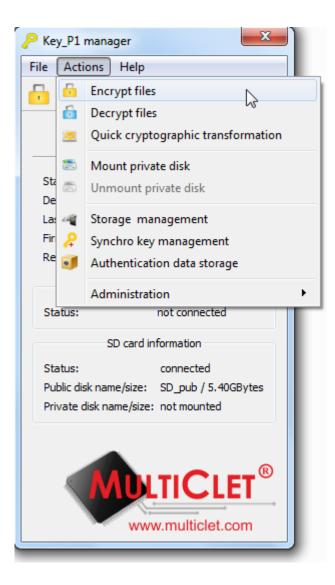


Figure 83: Files encryption

Window Encrypt files will be display (fig. 84). At the field Source directory and files to encrypt necessary with button Add files and Add directory add files or directory to encrypt (all files from directory will be encrypt).



P Encrypt files	? X
Source directories and files to encrypt	
advanced options	
Path	Add directory
	Add files
	Delete
	\searrow
Destination directory	
Append extension to each file crypt	
Cryptographic key random key	•
ОК	Cancel

Figure 84: Files encryption

For example press button **Add directory** and choose folder **input**. Thus all files in selected directory will be encrypt. Directory choice shown at the fig. 85



Select one or more directori	es to encr	ypt		1	×
🕞 🗢 💻 Рабочий стол	•		▼ ⁴ 7	Поиск: Рабочий стол	Q
Упорядочить 🔻 Новая	папка			= 1	. ()
🚺 Загрузки 🔦 🖳 Недавние места		.nx Папка с файлами			*
📃 Рабочий стол		1-отдел Папка с файлами			
🧊 Библиотеки 📾 Git 📄 Subversion 🗮	T	азр Папка с файлами			E
📑 Видео 📄 Документы 🔛 Изображения		DOC Папка с файлами			
Музыка		input Папка с файлами			
 Компьютер Локальный диск DVD RW дисковс 		Key_P1_manager Папка с файлами		~	
🔮 Дисковод BD-RC ▼ Папка:	input				•
			В	ыбор папки Отм	іена

Figure 85: Directory choice

In the next step press button Add files and choose two files, which plan to encrypt.

Select one or more files to	encrypt		1	×
G ♥ ↓ input_files		• 4 ₇	Поиск: input_files	Q
Упорядочить 🔻 Новая	і папка		!≡ ▼	
🚖 Избранное –	Имя		Дата изменения	Тип
〕 Загрузки	🖉 functions		10/17/2014 3:19 AM	Файл "ТЕХ"
📃 Недавние места	😰 install		10/16/2014 1:32 PM	Файл "ТЕХ"
 Рабочий стол Библиотеки Git Subversion Видео Документы Изображения Музыка 				
Компьютер Компьютер Локальный диск Имя ф	< айла: "install" "functions"	III		,
			Открыть 🔻 🔽	тмена

Figure 86: Files select

In the main window for encryption necessary set output directory (path to save encrypted



files) and encrypted method. Current window to encrypt files shown at the fig. 87.

P Encrypt files	? X
Source directories and files to encrypt	
advanced options	
Path	Add directory
C:/Users/Роман/Desktop/input	Add files
C:/Users/Роман/Desktop/input_files/functio	Delete
C:/Users/Роман/Desktop/input_files/install.tex	
	6
Destination directory	
Append extension to each file crypt	
Cryptographic key random key	•
OK	Cancel

Figure 87: Window for encryption

Choose directory for encrypted files as shown at the fig. 88.



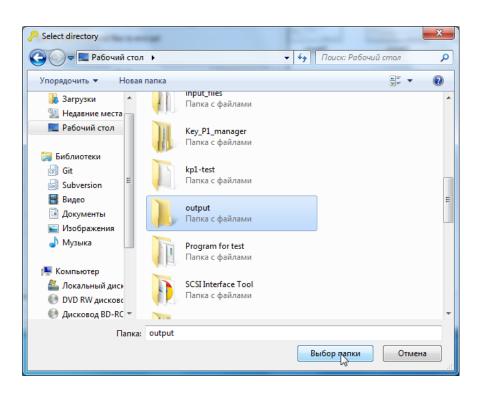


Figure 88:

At the window for encryption choose cryptographical method (in our example its "random"). Window for encryption will be as shown at the fig. 89. Press button "OK" to start files encrypt.



P Encrypt files	22.44	? X			
Source directories and files to	o encrypt				
Path	ı	Add directory			
C:/Users/Роман/Desktop	/input	Add files			
C:/Users/Роман/Desktop	C:/Users/Роман/Desktop/input_files/functio				
C:/Users/Роман/Desktop	C:/Users/Роман/Desktop/input_files/install.tex				
Destination directory	C:/Users/Роман/Desktop	p/output			
Append extension to each file	crypt				
Cryptographic key	random key				
	ОК	Cancel			

Figure 89: Select destination path

If at the field **Source directory and files to encrypt** was added directory that after set checkbox at the field additional options will be display following options (fig. 90):

1)File pattern. Define pattern to encrypt files. All files in the directory appropriate pattern will be encrypt.

2)Recursively. If set checkbox at this field all files at the directory and subdirectories will be encrypt. If checkbox not set that files from chose directory.



P Encrypt files	nn 4/1		5	? x	
Source directories and files to	encrypt				
☑ advanced options					
Pa	th	File pattern	Recursively	Add directory	
C:/Users/Роман/Desktop/	/input	*	V	Add files	
C:/Users/Роман/Desktop/	/input_files/functions.tex			Delete	
C:/Users/Роман/Desktop/	/input_files/install.tex				
Destination directory	C:/Users/Роман/Desktop/o	utput			
Append extension to each file					
Cryptographic key					
			OK	Cancel	

Figure 90: Encrypting files with additional options

In order to remove files or directory from list **Source directory and files to encrypt** necessary highlight files or directory and press button «Delete».

At the field **Add extension to encrypt files** there is a way to set extension, which file will be have. As a default files after enrypt procedure have extension «crypt». At the field **Cryptographical key** necessary choose encryption method, which will be use in encryption procedure. Available three methods: random key, synchro key and corporate key. After completed all actions press button «OK» to start encryption procedure.



3.4 Files decryption

In order to make files decryption procedure necessary consequentially choose tab Actions and **Decrypt files** item (fig. 91).

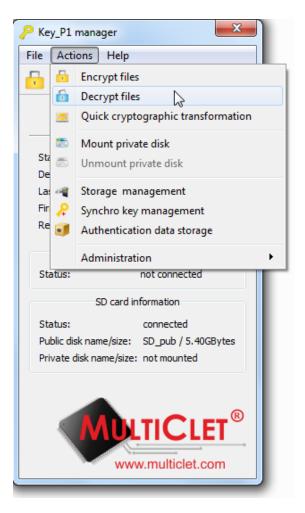


Figure 91: Files decryption

Window **Decrypt files** will be display(fig. 92). At the field **Source directory and files to decrypt** necessary with button **Add files** and **Add directory** add files or directory to decrypt (all files from directory will be decrypt).



P Decrypt files		? ×
Source directories a	nd files to decrypt	
advanced option	IS	
	Path	Add directory
		Add files
		Delete
		Delete
	2	}
Destination directory		
Cryptographic key	random key	•
Remove last exter	nsion from each source	file
		OK Cancel

Figure 92: Files decryption

For example add directory with files, which plan to decrypt. And add destination directory for decrypted files. At the fig. 93 shown example with choosing directory path.



P Decrypt files	? x				
Source directories and files to decrypt					
advanced options					
Path	Add directory				
C:/Users/Роман/Desktop/output	Add files				
	Delete				
	G				
Destination directory C:/Users/Роман/Desktop/input					
Cryptographic key random key	-				
Remove last extension from each source file					
ОК	Cancel				

Figure 93: Directory select

Choose cryptographical key (method) - synchro key and select key with label "Business trip". There is button "Management" for quick management with synchro keys. Window illustrate it shown at the fig. 94.



P Decrypt files		? ×
Source directories a	nd files to decrypt	
advanced option	IS	
	Path	Add directory
C:/Users/Роман/	Desktop/output	Add files
		Delete
Destination directory	C:/Users/Роман/Desktop/input	
Cryptographic key	syncro key	-
Synchro key	Business trip	
Remove last exter	nsion from each source file	43
	OK	Cancel

Figure 94: Directory select

If at the field **Source directory and files to decrypt** was added directory that after set checkbox at the field additional options will be display following options (fig. 95):

1)File pattern. Define pattern to decrypt files. All files in the directory appropriate pattern will be decrypt.

2)Recursively. If set checkbox at this field all files at the directory and subdirectories will be decrypt. If checkbox not set that files from chose directory.



-	_	Decrypt files Source directories ar advanced optior		4	140.)-	8 ×
		Pat	Add directory			
		C:/Users/Роман/I	Desktop/output	*	Recursively	Add files
			ß			Delete
	De	estination directory	С:/Users/Роман/	Desktop/input		
	Cr	yptographic key	syncro key			•
	Sy	nchro key	Business trip			Managing
	V	Remove last exter	nsion from each so	ource file		
			ОК	Cancel		

Figure 95: Files decryption

In order to remove files or directory from list **Source directory and files to encrypt** necessary highlight files or directory and press button «Delete».

At the field **Remove last extension from each source files** there is a way to remove extension, which file has before decryption. As a default files after decrypt procedure will be clear from extension «crypt». At the field **Cryptographical key** necessary choose encryption method, which will be use in encryption procedure. Available three methods: random key, synchro key and corporate key. After completed all actions press button «OK» to start decryption procedure.



3.5 Quick cryptographic transformation

Quick cryptographic transformation necessary for quick text messages encrypt or decrypt. In order to start work quick cryptographic transformation necessary sequentially choose tab **Actions** and choose **Quick cryptographic transformation** item (fig. 96).

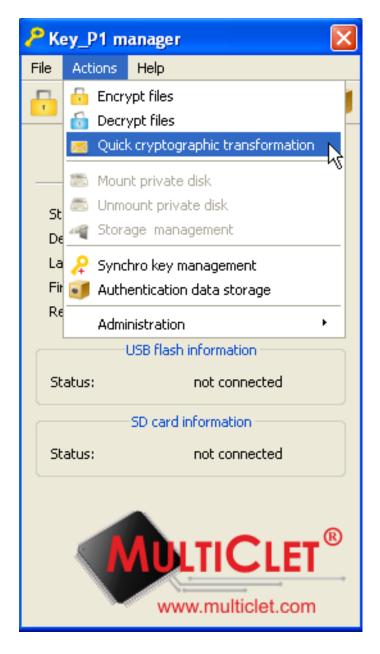


Figure 96: Choosing item

Window for text message encryption and decryption will be display (fig. 97).

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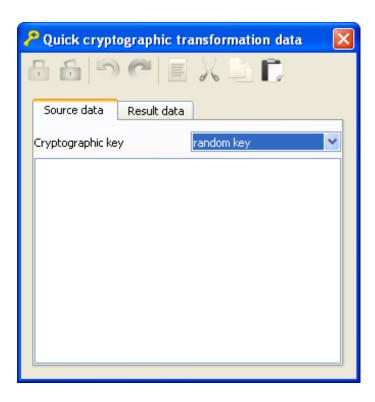
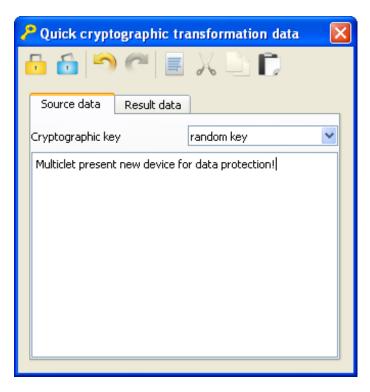
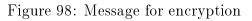


Figure 97: Quick cryptographic transformation

For example at the field **Source data** type text message for encryption, as shown at the fig. 98







After typing text message toolbar will be active (put in red at the fig. 99)

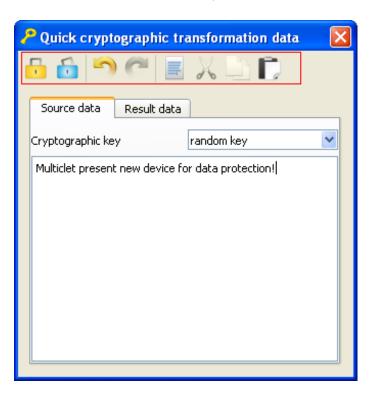


Figure 99: Toolbar

Toolbar items:

- $1) \ {\bf Message \ encrypt}$
- 2) Message decrypt
- 3) Cancel
- 4) **Return**
- 5) Select
- 6) **Cut**
- 7) **Copy**
- 8) Paste

At the field **Cryptographic key** can choose following options: random, synchro or corporate. After press button **Message encryption** and choice cryptographic key will be display window for entering user PIN, as see at the fig. 100.



Multiclet® Key_P1: Ivanov I. (manager)						-	-			? 💌				
						User	PIN 이	••						
OK Cancel														
•	0	1	2	3	4	5	6	7	8	9	-	=	Bks	p
Tab	q	w	e	r	t	У	u	i	0	р	[1	1	Clr
C	aps	a	s	d	f	g	h	j	k	I	;		Enter	
	□ Shift z x		c	v	ь	n	m	,	•	Shift 🗆				

Figure 100: Entering user PIN

In case successful entering user PIN will be display tab **Result data**, as shown at the fig. 101. Encrypted message can select with OS service or press button **Select all** at the toolbar. Then you may open messager, social net, mail client or other and paste "Result data".

🦰 Quick cryp	tographic tra	nsformation data	X
Source data	Result data		
a3AxcwAAAzuo Qx9gX/7TAt7HI	1D30RY1CyXudg /2gk/5wnZ6hJBł	y8vb8l1FJ63np3zDjOHCR (1RNJALw==	Ksi
L			

Figure 101: Result data

Message decryption perform similar method.



3.6 Corporate key management

In order to start work with corporate keys necessary consequentially choose tab **Actions** go to submenu **Administration** and choose **Corporate key management**(fig. 102).

	l manager		
Sta De La:	Quick cryptographic transformation Mount private disk Unmount private disk		
Fir 🔑 Re 🧃	Synchro key management Authentication data storage		
Status: Status: Public d	SD card information	 C Z I 	Read only mode management Update firmware Initialize device Change Key_P1 Label
	disk name/size: not mounted	2 2 2	Change admin PIN Change user PIN Change alarm PIN Corporate key management
	WDLTICLET® www.multiclet.com		Event log

Figure 102: Corporate key management

Window with entering administrator PIN field will be display. Press button «OK» after entering administrator PIN (fig. 103).



	Administrator PIN												
	OK Cancel												
· 0 1 2 3 4 5 6 7 8 9								9	-	=	Bksp		
Tal	b q	w	e	r	t	у	u	i	0	p	[]	/ Clr
	Caps	a	s	d	f	g	h	j	k	I	;		Enter
	□ Shift			x	с	v	Ь	n	m	,			Shift 🗆

Figure 103: Entering administrator PIN

Window Corporate key management will be appear (fig. 104).

P Corporate key managing	x
External corporate key groups	Key_P1 corporate key groups

Figure 104: orporate key management

This window is divide on: Eternal corporate key base and Key_P1 corporate key base. External corporate key management perform with following toolbar (fig. 105)(highlight in red):



Corporate key managing	
External corporate key groups	Key_P1 corporate key groups

Figure 105: Corporate key management

Observe items are intended to manage external base:

- 1) Create new corporate key base creating new base;
- 2) Open corporate key base open corporate key base;
- 3) Save corporate key base save current base to file;

4) Add corporate key group to base - adding corporate key group. To do this action necessary set group label and keys count (fig. 106);

Corpora	te key grou	2	x					
Name	Developers							
Key count	3		-					
0	K C	ancel						

Figure 106: Adding corporate key group

For example add group "Developers" and for its group will be generate 3 keys. After press button "OK" will be display window shown at the fig. 107.



External corporate key groups *		Key_P1 corpora	ate key groups	
Developers				
	13			

Figure 107: Adding corporate key group

5) Edit corporate group in base - this command allow to change corporate key group label; Window for changing corporate key group label shown at the fig. 108

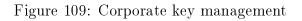
P Cor	porate key group editing
Name	Developers
	OK Cancel
	Cancel

Figure 108: Changing corporate key label

6) Deleting corporate key group from base - delete corporate key group from base.

Management Key_P1 corporate key base perform with the following commands as icons from left to the right (fig. 109)(highlight in red):

?	Corpo	rate ke	y mana	ging	_		-	-	-			-	-	×
	Extern	al corp	orate k	ey gro	ups				Key_P1 co	orporate	e key gro	oups		
				-		_						2		
				+		-				-	-		2	





1) Add corporate key group in Key_P1 base - adding corporate key to Key_P1 base. To do this operation necessary set group name and keyscount (fig. 110);

Corpora	te key grou	2	x
Name	Market		
Key count	4		×
0	кЪС	ancel	

Figure 110: Adding corporate keys group

2) Delete corporate key group from Key_P1 base - deleting corporate key group from Key_P1 base;

3) **Apply changing in Key_P1 base** - saving all changing in Key_P1 base. After complete this command necessary enter administrator PIN (fig. 111). Press button «OK» to continue.

P Mult	ticlet(B Key_	P1: Ivar	nov I. (m	nanager)									? <mark>- </mark>
						Admin	istrator	PIN 이	••						
							ок [~	Cancel						
		0	1	2	3	4	5	6	7	8	9	-	=	Bks	sp
Т	ab	q	w	e	r	t	У	u	i	0	p	[Clr
	Сар	os	a	s	d	f	g	h	j	k	I	;		Enter	
	□ Shift		z	x	c	v	Ь	n	m	,	•		Shift 🗆		

Figure 111: Enter administrator PIN

After changing apply in the corporate key group base management window will be as shown at the fig. 112. Thus in the device will be create "Market" group.



Corporate key managing	dente
External corporate key groups *	Key_P1 corporate key groups *
Pevelopers	Market
🗟 🗟 🖶 🛃 🖿 🕨	

Figure 112: Corporate key management

3.6.1 Hierarchical access creating example

Consider the example about hierarchical access organization. Open window «Corporate key management»(tab Actions->Administration) and in the left section press button «Add corporate key group into database», as shown at the fig. 113

External corporate key groups	Key_P1 corporate key groups	

Figure 113: Corporate key management

Create corporate key group «Counting room» and generate 3 keys for this group. Note that assignment several keys to this group does not complicate work, because device Key_P1 automatically recognize that user have or have not keys to decryption file for selected group name. Let us consider this point later. Corporate key group creation example shown at the fig. 114

Corpora	te key grou 🔋 🗾 🏹
Name	Counting room
Key count	3
0	K Cancel

Figure 114: Corporate key group creation

After press button «Ok» this group will be display in the section external corporate key groups with icon «plus», means that corporate key group created, but not added into the external database, see fig. 115



External corporate key groups *	Key_P1 corporate key groups
Counting room	

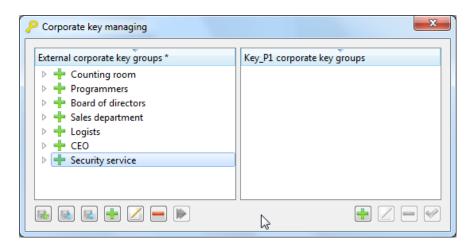
Figure 115: Corporate key group creation

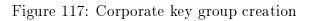
Similarly add group «Programmers», assign for this 2 keys, which will be generate, see fig. 116

P Corpora	te key grou 🔋 🗾 🏹
Name	Programmers
Key count	2
0	Cancel

Figure 116: Corporate key group creation

Add all necessary groups into external corporate database, result see at the fig. 117







In the next step save external database to file, as see at the fig. 118

Corporate key managing	×
External corporate key groups *	Key_P1 corporate key groups
Counting room Programmers	
 Herein Board of directors Herein Sales department 	
Image: Provide the second s	
Security service	
Save corporate key database	

Figure 118: External corporate key database saving

After press button «Save external database» will be display window for setting file name and path to file, which will be contain database, see fig. 119

P Save	-	Constantion of the local division of the loc			×
🔾 🗢 💻 Рабоч	чий стол 🕨		▼ 4	Поиск: Рабочий ст	ол 🔎
Упорядочить 🔻	Новая папка			L.	- • 🕡
 Рабочий стол Библиотеки Git Subversion Видео Документы Документы Изображения Музыка Жомпьютер Локальный ди DVD RW диска Докальный ди 		meet_time Текстовый документ 337 байт mpc Рисунок PNG 142 КБ NX Client for Windows Ярлык 974 байт protocol_lib Текстовый документ 781 байт Server Ярлык 2.01 КБ			II.
<u>И</u> мя файла:	corp_base	<i>z</i>			-
<u>Т</u> ип файла:					•
🔿 Скрыть папки				Со <u>х</u> ранить	Отмена

Figure 119: External corporate key database saving

Security administrator must keep corporate key database at trusted PC or at protected storage(for example in the private partition are created by Key_P1 device or this file may be enrypted with Key_P1). Hierarchical access organization is set by security administrator



define composition corporate key group on user's devices Key_P1. Suppose that company director needed in data exchange with all company department, then security administrator open section «corporate key management» on director's Key_P1 device and press button «open external corporate key database», as shown at the fig. 120

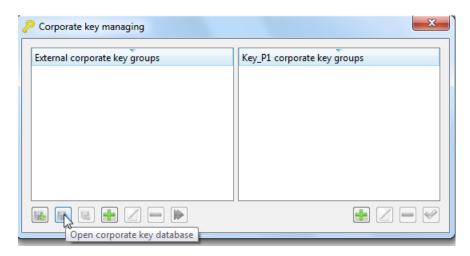


Figure 120: Corporate key group management

Then security administrator choose file with corporate key database and press button «Open», as shown at the fig. 121

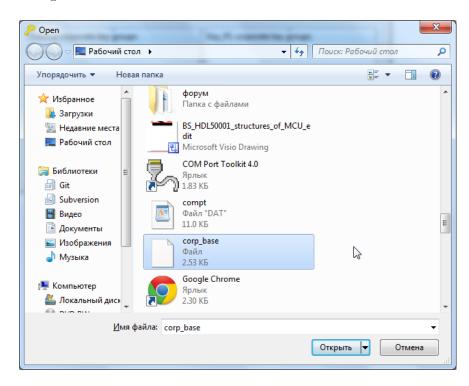


Figure 121: Opening external corporate key database



In the left section of the corporate key management window will be display list of available group from external database, see fig. 122

Corporate key managing	×
External corporate key groups	Key_P1 corporate key groups
 Counting room Programmers Board of directors Sales department Logists CEO Security service 	

Figure 122: External database corporate key groups

Press button «Add corporate key group» to transfer group from external database to director's device Key_P1, see fig. 123

 Sales department Logists CEO

Figure 123: Setting corporate key groups to device from external database

After complete all corporate key transfers press button in the right section «Apply Key_P1 database changes», as shown at the fig. 124



External corporate key groups	Key_P1 corporate key groups *
🕨 🛩 Counting room	Counting room
Programmers	🗅 🕂 Programmers
V Soard of directors	Board of directors
🖻 🕪 Sales department	Image: Sales department
V V Logists	🗅 🕂 Logists
🖻 🛩 CEO	EO
Security service	Security service

Figure 124: Setting corporate key groups to device

After success groups setting to device near all group will be display «check», see fig. 125



Figure 125: Corporate key groups are installed to device

For users, for instance, «Counting room» department key groups install on device similarly. Add key groups that needed for «Counting room» department, see fig. 126



External corporate key groups Counting room Programmers Sales department Sales department CEO Security service	Key_P1 corporate key groups * Counting room Programmers Board of directors Sales department

Figure 126: Corporate key groups for setting to device

Then press button «Apply Key_P1 database changes», as shown at the fig. 127

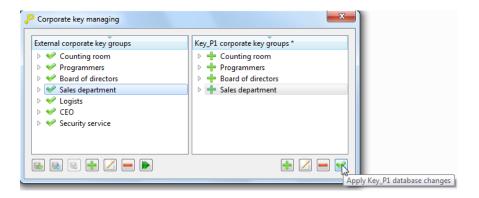


Figure 127: Corporate key groups setting on device

As a result will be display window, as shown at the fig. 128

External corporate key groups Counting room Programmers Board of directors Sales department Sales department CEO Security service	Key_P1 corporate key groups Counting room Programmers Soard of directors Sales department
--	---





Security service fucntions about hierarchical access organization finish after set define list of corporate key groups for every users in department.



3.6.2 Enrypt data with corporate key

Data encryption with corporate key occur with universal window for data encryption with random, synchro, corporate keys. To do open window «Encrypt files» go to tab Actions->Encrypt files or with button in a toolbar, as shown at the fig. 129

🤌 Key_P1 manager 📃 💌		
File Actions Help		
Encrypt files		
Encrypt files h J.(developer)		
Key_P1 information		

Figure 129: Data encryption

At the field crypthographic key necessary choose «corporate key», type user PIN code, after this choose corporate key for data encryption, for example «Sales department», see fig. 130

Source directories and files t				
advanced options				
Path		Add directory		
C:/meet_time.txt		Add files		
		Delete		
estination directory	C:/			
opend extension to each file				
estination directory opend extension to each file ryptographic key orporate key group	crypt			

Figure 130: Data encryption window

Choice files or directories for ecnryption and destination directory in details described in the



chapter 3.3(Files encryption). To start encryption process press button «Ok». Ecnryption progress display in the bacground operation window, as see at the fig. 131

🔑 Device background tasks 👘 🖳		×
Smith J. (developer)	+	•
Encrypting file(s) by corporate key		×
C:/meet_time.txt		
	1	00%
	1	00%
Completed successfully		
		\searrow

Figure 131: Data encryption progress

As a result in the destination directory will be file are echrypted with one from several keys for choosen department.



3.6.3 Decrypt data with corporate key

Data decryption with corporate key occur with universal window for data decryption with random, synchro, corporate keys. To do open window «Decrypt files» go to tab Actions->Decrypt files or with button in a toolbar, as shown at the fig. 132

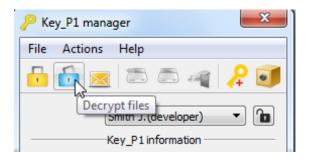


Figure 132: Data decryption

At the field crypthographic key necessary choose «corporate key», type user PIN code, after this choose corporate key for data decryption, for example «Sales department», see fig. 133

P Decrypt files		? X
Source directories a		
	Path	Add directory
C:/meet_time.txt	.crypt	Add files Delete
Destination directory Cryptographic key Corporate key group I Remove last exter	corporate key	····
	OK	Cancel

Figure 133: Data decryption window

Choice files or directories for decryption and destination directory in details described in



the chapter 3.4(Decrypt files). To start decryption process press button «Ok». Ecnryption progress display in the bacground operation window. As a result in the destination directory will be file are decrypted with one from several keys for choosen department. Key_P1 device automatically detect if there is key for decryption after choosing department that send file, if Key_P1 device have key that file will be decrypt.



3.7 Limitation access to removable storages

Security service of the company may be block with internal security policy to lock a way write information from corporate PC on removable drives. For its can be set read only mode in order to Key_P1 will be lock on hardware level any unauthorized write of confidential data, viruses or other application on a storage. Write any information in this mode will be abort, user must have a permission to change read only mode or not active read only mode for write.

In order to set read only mode necessary consequentially choose tab **Actions** go to submenu **Administration** and choose **Read only mode management** (see fig. 134)

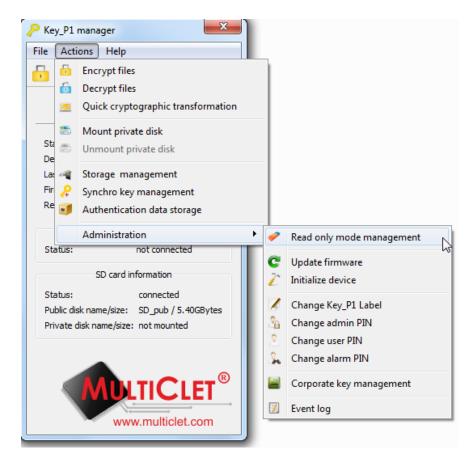


Figure 134: Read only mode management

After success entering administrator PIN window for read only mode management will be display. Administrator can allow access to read only mode management by user or set(unset) read only mode without user access to this management(fig. 135).

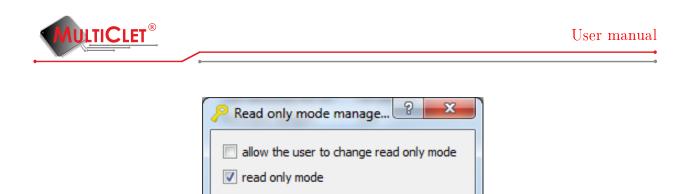


Figure 135: Entering administrator PIN

Cancel

OK

In case setting read only mode with the next enter administrator PIN (see fig. 136) in the main menu Key_P1 Manager user can see set checkbox at the field read only mode (see fig. 137)

Multiclet	® Key_	P1: Ivan	nov I. (n	nanager)								2	х
					Admin	iistrator	PIN 이	•••						
						OK		Cancel						
							-)	
•	0	1	2	3	4	5	6	7	8	9	-	=	Bksp	
Tab	q	w	e	r	t	У	u	i	0	P	[]	/ Clr	
Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter	
	🗆 Shift		z	x	c	v	Ь	n	m	,	•		Shift 🗆	

Figure 136: Entering administrator PIN



Key_P1 manager	×
File Actions Help	
🗗 🙆 🖂 🖾	ق 🐥 🛋 🛋
Ivano	v I. (manager) 🔻 🚹
Key_P1 in	nformation
Status:	ready to use
Device label:	Ivanov I. (manager)
Last disconnected at:	not defined
Firmware version:	134
Read only mode	\checkmark
USB flash i	nformation
Status:	not connected
SD card in	nformation
Status:	connected
Public disk name/size:	SD_pub / 5.40GBytes
Private disk name/size:	not mounted
	TICLET ®

Figure 137: Application main window





3.8 Event log

Key_P1 device leads event log of main actions. In the device event log record main actions with timestamp. Display device connection time, mount private partition and etc. Thus Key_P1 disconnect with unauthorized copy confidential information from corporate PC on internal storage, will be record (record stamp about time and date) and available to security service.

In order to open log event necessary consequentially choose tab Actions go to submenu Administration and choose Log event item (see fig. 138)

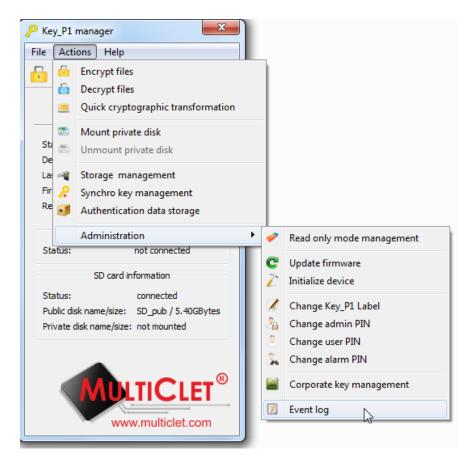


Figure 138: Log event

Event log section contain connection/disconnection Key_P1 device log and main user event log. Window with time log present at the fig. 139



here a contract contr	
C	
Key_P1 "Key_P1"	
Date 🔻	Event
31.10.2014 18:08:46	Key_P1 device is disconnected
31.10.2014 17:55:40	Key_P1 device is connected
31.10.2014 17:55:19	Key_P1 device is disconnected
02.11.2014 21:20:16	Key_P1 device is connected
02.11.2014 21:19:06	Key_P1 device is disconnected
02.11.2014 21:15:00	Key_P1 device is connected
02.11.2014 21:14:49	Key_P1 device is disconnected
02.11.2014 21:12:41	Key_P1 device is connected

Figure 139: Log event



3.9 Autentication data storage

Device allow to save users passwords and logins on internal protected memory of the Key_P1 device. This function allow secure data to access on internet services: «Mail.ru», «Gmail.com», «Mail.yandex.ru» from unauthorized access, as it's happen at the autumn 2014 year with 6 million accounts other users. It's reach with settings sophisticated and long password. In order to use this functions necessary consequentially choose tab **Actions** and **Autentication data storage** item (fig. 140).

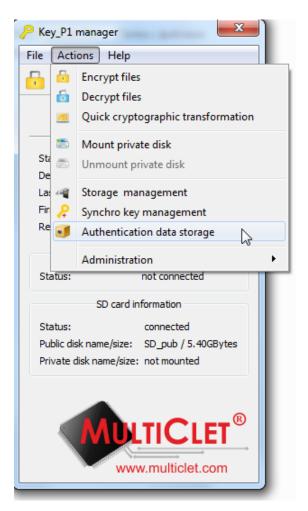


Figure 140: Autentication data storage

Login and password to information source is a autentication data. Window with user PIN field will be display. Press button «OK» to continue(fig. 141).



						User	PIN 👓	••					
						ОК [2	Cancel					
	0	1	2	3	4	5	6	7	8	9	-	=	Bksp
Tab	q	w	e	r	t	У	u	i	0	p	[]	/ Clr
Ca	aps	a	s	d	f	g	h	j	k	I	;		Enter
	□ Shift		z	x	с	v	ь	n	m	,	•		Shift 🗆

Figure 141: Entering user PIN

Main window **Autentication data storage** will be display (fig. 142). Window consist from two part. In the left part user can create groups for logins and passwords for access to information services defined themes. In the right part user can record password, login and other information. Create new group «Mail». For it's necessary press button **Add** in the left part.

Authentication data storage	
Groups	Label Login Password Website Add
General 💫	Edit Delete Delete all
Add Edit Delete	

Figure 142: Data storage window

Window for setting label (name) new group will be display (fig. 143). Press button «OK» to continue.



roups		Label Login Password	Website	Add
General	Group label Ma	а а		Edit Delete Delete a

Figure 143: Group label

At the left part new group «Mail» appeared (fig. 144). Make adding new logins and passwords for email service «Mail.ru». To do this press button **Add** in the right part of the window.

						User	PIN 이	••						
						ок	_ _	Cancel						
							, 							
•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp
Tab	q	w	e	r	t	У	u	i	0	p	[]	1	Clr
Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter	
	□ Shift		z	x	c	v	Ь	n	m	,			Shift 🗆	

Figure 144: Data storage window

Autentication data storage window will be display (fig. 145). At the Group field necessary choose group for information resource. At the **Description** field necessary add description or destination of information resource. At the **Site** field may add internet address for information resource. At the **Login** field may type login to access on information resource. At the **Password** field necessary type password to access on information resource. At the **Confirmation password** field type password. After all actions completed press button «OK».



?	Authen	ticatior	data a	dding	-	-	- 1		-	12	-			4	2 x
					Group	þ		Gene	ral		•				
					Descr	ription		My m	ail						
					Webs	ite		gmail	.com						
					Login			user							
					Passi	word		•••	•						
					Passi	word con	firmatio	n ••••	•						
							OK		Cancel						
	•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp
	Tab	q	w	e	r	t	У	u	i	•	р	[]	/	Clr
	Ca	ps	a	s	d	f	g	h	j	k	I	;		Enter	
		🗆 Shift		z	x	c	v	Ь	n	m	,	•		Shift 🗆	

Figure 145: Adding autentication data storage

Window for entering user PIN code will be display. After entering user PIN necessary press button «OK» (fig. 146).

P Mu	ulticlet	® Key_l	P1: Ivan	ov I. (m	anager)	-								?	X
							User	PIN 이	••							
							ок	2	Cancel							
ſ							-									1
	•	0	1	2	3	4	5	6	7	8	9	-	=	Bk	sp	
	Tab	q	w	e	r	t	У	u	i	0	р	[]	/	Clr	
	Cap	os	a	s	d	f	g	h	j	k	1	;		Enter		
Ĩ	1	□ Shift		z	×	c	v	ь	n	m	,	•		Shift 🗆		

Figure 146: Entering user PIN

At the right part will be display information about «Mail.ru» (fig. 147).



iroups		Label	Login	Password	Website	Add
General Mail		My mail	user	*****	gmail.com	Edit
						Delete
				\searrow		Delete a

Figure 147: Data storage window

In order to make data copy and transfer it to window with autorized resource fields, initially necessary make copy resource URL - impose mouse cursor and on the field under title **Site** and with double click to make data capture (fig. 148). In the left part of the window will be display information about time before echange bufer will be clear.

Groups		Label	Login	Password	Website	Add
General Mail		My mail	user		gmail.com	Edit
IVIdii			13			Delete
						Delete all
						Derete di

Figure 148: Data copy

Then necessary to use information resource URL. Open internet browser and paste URL at the address field, for example with mouse right button click choose command "Paste". After it necessary press key «Enter». Autorized window «Mail.ru» will appeared(fig. 149).



Email	
Password	
Sign in	
Stay signed in	Need help?

Figure 149: Autorized window

Then necessary to make copy login. To do this necessary impose mouse cursor at the field **Login** and with double click to make data capture (fig. 150). In the left part of the window will be display information about time before echange bufer will be clear. In the next step necessary impose mouse cursor in the autorized window at the field Login and press mouse right button and make command «Paste».



Sign in to continue to Gmail

0	
user	
Password	
Sign in	
Stay signed in	Need help?

Figure 150: Autorized window

Then necessary to make password copy. To do this necessary impose mouse cursor and at the **Password** field and with double click to make data capture (fig. 151). In the left part of the window will be display information about time before echange bufer will be clear. In the next step necessary impose mouse cursor in the autorized window at the field Login and press mouse right button and make command «Paste». After it may be press button "Enter" and occur autorization.



Sign in to continue to Gmail

user	
•••••	
Sign ir	1
Stay signed in	Need help?

Figure 151: Autorized window

Any autentication data will be change. In order to perform this procedure necessary in the main window **Autentication data storage** click at the right part **Edit** (fig. 152).

iroups		Label	Login	Password	Website	Add
General		My mail	user	*****	gmail.com	Edit
Mail			i			Delete
						Delete a
						Delete al

Figure 152: Editing autentication data

Window for editing autentication data will be display (fig. 153). Any information may be change in this window. Press button «OK» to complete.



?	Authen	tication	n data a	dding	-	6.			-		-			9	? <mark>x</mark>		
					Group	5		Gene	ral		•						
	Description																
Website gmail.																	
	Login user																
					Passv	word		•••	•								
	Password confirmation ••••																
	OK Cancel																
	` 0 1 2 3 4 5 6 7 8 9 - = Bksp								sp								
	Tab	q	w	e	r	t	У	u	i	•	р	[] / Clr				
	Caps a s d f g h j k l ; Enter																
		🗆 Shift		z	x	с	v	b	n	m	,	•		Shift 🗆			

Figure 153: Autentication data editing

Window for user PIN entering will be display. After entering PIN code necessary press «OK» (fig. 154).

P Authenti	ication	data a	dding	-	6	. 1		-	1				2	2 ×		
				Group			Gene	ral		•						
				Descr	ription		My m	ail								
Website gmail.com																
	Login user															
	Password ••••															
				Passv	word con	firmatio	n ••••	•								
	OK Cancel															
	0	1	2	3	3 4 5 6 7 8 9 - = Bks							sp				
Tab	q	w	e	r	t	У	u	i	0	р	[] / Clr				
Cap	Caps a s d f g h j k l ; Enter															
	□ Shift z x c v b n m , . Shift □															

Figure 154: Entering user PIN



4 Frequently asked questions

Question 1: Is it possible to use and keep person confidential information on the device if this information is not a login or password?

Answer: For example user can save credit card number at the «login» field and cvv number at the «password» field.

Question 2: Where keys for encryption saved? Can I get keys from device?

Answer: Keys for encryption saved in the protected memory of the device. As a security measure device not return any keys. But possible device recovery if in during device initialize process keys list was saved.