FINEST user manual.
V 1.0

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Possibilities of system.

FINEST it is decrypted as «Files and Images NEtwork STorage».

FINEST allows to create centralized storage for the backup storage and restoring of images of partitions of disks and also user's files. The system is controlled by means of the web oriented interface of the manager.

FINEST also contains a subsystem of automatic inventory of computers which allows to research the hardware of inventoried computer's and to watch changes in a hardware configuration.

System usage essentially facilitates creation and management of backup copies of the user's computers connected to a local area network.

The description of the interface of system.

To the system interface it is necessary for access, on the computer with which there is an access to FINEST, in a browser address bar to enter the address of a server of system and relative path to the interface.

For example, if the server is accessible by name backup-server in a browser address bar it is necessary to enter the following: http://backup-server/finest/.

Further it is necessary to enter the user name and the password for access to system. By default the pair the user/password is equal admin/admin. If the name and the password is entered correctly in a browser window the main interface part of system, as is shown in fig. 1 will be displayed.

Figure 1

In a figure by numbers are designated:

1 — Network name of the reserved computer;
2 — IP the address of the reserved computer;
3 — MAC the network card address;
4 — Icon of creation of an image of disk partitions;
5 — Icon of restoring/cloning of partitions;
6 — View of the created backup copies of files;
7 — Configuration of a subsystem of a backup of files;
8 — Access to tools of remote reboot of the reserved computer;
9 — Subsystem of inventory of the hardware;
10 — Editing of the share name and IP/MAC addresses of the reserved computer;
11 — Removal of the reserved computer from system;
12 — Addition of the reserved computer in system;
13 — FINEST configuration;
14 — Page for downloading of the additions installed on user machines.

NOTE: At the very first start of system when it is not added yet any user's computer, the information and the iconic menu, designated by numbers from 1 to 11 will be absent.

Addition/editing/removal of the reserved computer in system.

For addition of the reserved computer in system click left mouse button on the link of the main interface «Add host»

At the interface bottom page, you will be necessary to fill fields containing, computer network name, it IP the address and MAC the network card address then to press button "Append". If the entered information does not contain errors, the computer will be added in system.

Removal of the reserved computer from FINEST is made by click on the icon «Delete host»

At the interface bottom page, you will be necessary to confirm removal from system, having pressed the button «Yes, delete this host».

If you need to change the information on the computer network name, it IP the address or MAC the network card address it is necessary click on icon «Edit host config»

NOTE: For correct work your system in network configuration of client computers it is necessary to specify automatic reception of network configuration via DHCP. All the necessary information will be given from DHCP server working together with FINEST.

Creation of an image of partitions of the reserved computer.

To create copies of sections of the computer it is necessary to click on the menu item «Create disk image» .

At the interface bottom frame it is necessary to enter into an appropriate field the name for an image of partitions of the computer.

Also it is possible to enter names of partitions which are excluded from an image. If this field to leave empty on the reserved computer copies of all accessible partitions will be created. It is necessary to specify names of excluded partitions on one in each string of edit field and they should be in Linux style (see. table 1).

hda	First IDE master	sda	1-st SCSI/SATA harddrive
hdb	First IDE slave	sdb	2-nd SCSI/SATA harddrive
hdd	Second IDE master	sdc	3-rd SCSI/SATA harddrive
hdc	Second IDE slave	sdd	4-th SCSI/SATA harddrive

Table 1.

After a disk lettering follow the digit designating number of partition on a disk. The main partition on a disk can be four (for example: from sda1 to sda4). But except the main partition, on a disk it is possible to create the extended partition which is designated by digit 5 (for example: hda5). And already this extended partition can contain set of the additional partitions designated by numbers from 6 and further (for example: hda6, sda8 etc.)

Last at creation of an image of disks it is possible to select compression level. In total well three sorts of compression: without compression, average compression and maximum compression. The higher level of compression the takes a file with image of a place on a disk less, but process of creation of such image occurs that longer.

To start process of creation of an image press the button «Create diskimage» then there will be an inscription «Needed reload of host» and the button «Cancel image creation» for cancellation of this process.

If on the reserved computer is installed remote network reboot service, which can be downloaded from a page of downloading of additions (see fig. 1 pos.14) this computer can be rebooted by means of the choice menu option «Reload this host»

To start reboot process it is necessary to type the password, which formed at installation of this service on the reserved computer, and to press button "Reboot". Also it is possible to set a latency of the beginning of reboot (in minutes) and network port of this tools (by default it is equal 5555).

That there was an image of partitions for the reserved computer it is necessary that its network card supported loading on PXE. After reboot of working system on PXE from server FINEST on a network the special distribution kit which will automatically create will be loaded or will restore images of a disk. If your network card does not support loading on PXE it is possible to download a special image for floppy, CD- or USB- disk from a page of loading of additions. Having booted from a disk on which such image is written, the network card can use loading on PXE. The disk containing this image, should stand the first in the list of booting of your reserved computer.

Restoring/cloning of partitions from image.

If you want to restore partitions of the reserved computer or to create precisely same partitions, with the saved information, on other computer registered in system FINEST click on the menu item «Recovering partition»

If for the demanded computer images their list will be displayed at the window bottom have been created. It will be necessary for you to select one of images and to press the button «Start recovery/clone».

If it is necessary to recreate the same sections on other computer (to create a clone of a disk of the initial computer on other) it is necessary to select its share name from the list and to press the button.

After that there will be an inscription about necessity of reboot of the computer on which there will be a restoring of partitions. If you want to stop this process, please click on the button «Stop recovering».

Reboot process can be made in the same way what is described for creation of images of sections (see the previous item of the documentation).

Creation of backup copies of files for the reserved computer.

Creation of copies of files from user's computers is made by system BackupPC. For successful operation of this system of a backup on computers it is necessary to give network access to the directories containing the user's data. For OS of the set of Windows it can be made simple opening of network access to folders, or installation of special service rsyncd which can be downloaded from a page with additions. For OS of GNU/Linux set to directories it is possible to give access or by means of expansion samba server, or by means of the same tools rsyncd.

After opening network access to reserved directories it is necessary to configure a server of backup BackupPC. For this purpose click on the button «Config files backup»

At the interface bottom the window of configuration will open. Follow the link "Xfer". Fill following fields:

- **XferMethod** — Access method choice to network resources of the reserved computer. If the network share access to folders of Windows is opened or the server samba in GNU/Linux is installed - then this value equals **smb**. If service Rsync installed value rsyncd is equals **rsyncd**.
- **ClientCharset** — Code page which is used on the side of the client. For Windows enter this value equal cp1252, for the majority of modern distribution GNU/Linux this value should be equal utf8.
- **SmbShareName** (or **RsyncShareNam**e if **XferMethod** equal **rsyncd**) — Depending on selected XferMethod here it is necessary to enter a network resource name on the side of the reserved computer. Here it is possible to specify some network resources, using button "Insert".
- **SmbShareUserName** (или **RsyncShareUserName**) — It is necessary to specify the user name to which access to this network resource is resolved.
- **SmbSharePasswd** (или **RsyncSharePasswd**) — The password of the user on access to a network resource of the reserved computer.

By reference "Scheduler" it is possible to change the period, following to which, the system will watch changes in user's files. For it the option «Blackout Periods» responds. In hourBegin, hourEnd and weekDays fields it is possible to specify the time period, and also days of week in which to make monitoring of files for a backup.

That all configurations for the client were saved, press button "Save" placed at the top of page. After saving of configuration overload a server through the choice main menu item «Server → Admin options».

If all configuration are fulfilled correctly after a while there will be backup copies of files.

Restoring of files from backup copies.

If there will be a necessity for restoring of user's files it is necessary to click on the menu item «View backup files copies» . At the bottom window there will be an interface for review of the created backup copies. By default, the latest successfully created copy is displayed. If it is necessary to select earlier copy she can be selected from the list at the top of page. Also the complete list of files and directories which can be restored is accessible. Will select the necessary components for restoring and press the button «Restore selected files». After that it will be offered to you three variants of restoring:

- Direct restoring — if access to a network resource is opened on reading and record by means of this method it is possible to restore easily the files selected by you on the user's computer for what it is necessary to confirm this operation by the button «Start restoring».
- Download ZIP archive — if access on record to a network resource is absent, you can download zip the archive containing backup copies of files, and then to restore from its the necessary files. If the quantity and size of restored files occupies considerable size can a lot of time for creation and storage of such archive is required.
- Download TAR archive — an operation principle is similar described above, but the type archive tar will be created.

A subsystem of automatic inventory.

As system of automatic inventory of computers in FINEST it is used MyZCI. To register the computer from Windows OS in system it is necessary in Internet Explorer in an address bar to enter the link to the main page MyZCI, for example: *http://backup-server/myzci/*. After that, on the main page it is necessary to press the button «Register computer», and to follow further to the instruction written on page.

If the information on the computer does not appear in system, by pressing the item of the iconic menu «Hardware info» can is required installation of MS Windows Scripting Host which can be downloaded from the main page MyZCI. Also the reason of absence of registration in system can be in too high level of safety installed in IE. Can addition of server MyZCI in number of the trusted sites is required.

For registration of computers from GNU\Linux set OS it is necessary to download from the main page MyZCI and to instal scripts of automatic collection of the information. Also in system should be installed **lshw**, **read-edid** and **sun-jdk**. From the main page also it is possible to download a script of automatic collection of the information for OS of the set of Windows.

The information on the computer contains the equipment installed in the computer, its serial numbers (if such probably to receive automatically), and also the installed software.

System configuration.

If to click on an icon of the iconic menu «System config» at the interface bottom there will be a list of changeable configuration of FINEST system.

Here some parametres given DHCP by a server for clients of system FINEST are added. It is possible to specify, through a comma, gateway servers existing in your network; also it is possible to register servers of domain names and domain suffixes.

In section «System configuration» absolute and relative paths to the important components of system FINEST are specified. If after base installation you have transferred some directories to other place, without fail change these configuration. Also here it is possible to specify interface language. Three variants are at present supported: «ru.pm» - for Russian, «uk.pm» - for Ukrainian language and «en.pm» - for English.

In section "Security" you can enter path and file name of password file, and you can possible to change the user name and the password, for access to interface FINEST.

All changes in customisation it is necessary confirm «Submit changes» button in the bottom of page.