

1 Introduction

Roman philosopher Senecae wrote that time was the most valuable thing in the world. We, our children and our employees spend a lot of time in vain. But all of us would like to spend it more effective. We all use computer and internet in our daily life.

- ***Do you want to optimize computer usage? Do you want to track how employees use computer and internet in your company? Do you worry that your children spend too much time playing computer games and surfing internet?***

User Tracker is suitable and powerful time tracking and monitoring software for you if you are:

- individual user and would like to analyze, competently plan and organize usage of your computer.
- company manager or system-administrator and would like to track employees internet and computer usage at your company, to evaluate and improve employee productivity.
- internet-cafe owner and would like to find out most popular applications your customers use and to track internet time usage.
- parents and would like to know if your kids spend too much time on computer and what they are doing (playing games, surfing internet, etc.).

User Tracker allows you to analyze computer usage, estimate project time, track work time and analyze work process. It's easy way for employees activity monitoring. To improve the productivity you should find out who is the best and the lasiest employee in your company, who spends much time on web surfing and other internet activities or just play games at their workplace.

Analyzing User Tracker reports you will know how much time employees spend on a specific application and documents, whose productivity is high and who is the best in using different applications.

User Tracker can easily prevent Internet abuse both in your company in your home. User tracker logs any web page visited (it's address and title) and calculates time your employee or kids spend there.

User Tracker is useful tool for parental control. Computer game addiction more often becomes a problem both for children and for adults. User Tracker is useful to control computer time usage.

It is possible to look-up statistics for any time period of work, to sort and make any groupings of results. You can use various modes of results presentation, e.g. tables, charts. Reports can be generated in HTML format. If you use local network you can group computers and present integrated statistics for each group.

You can monitor online user's computer activity (active, idle or turned off) and the latest task performed on this computer.

- **Key features**

- **Client-server design is well suitable for LAN**

- User Tracker is based on client-server approach, so you can easily deploy it over a LAN.

- **High performance**

- User Tracker does not impact overall system performance.

- **Ideal for both business and home users**

- User Tracker is effective and suitable for work both with one computer and in business environment.

- **Rich functionality**

User Tracker is feature-rich application that provides various reporting modes and a number of ways to analyze collected data.

- **Easy-to-use interface**

- ***New! Custom Report on demand!***

If you need a custom report, we can develop it for you! Just send us a letter with the report description and we will provide you with further information. We charge a reasonable service fee for this service (price depends on report complexity, usually it's about \$50). This service is available for registered users only.

- **System requirements**

- User Tracker requires Windows 98/Me/NT 4.0/2000/XP/2003. You can run User Tracker under Windows 95 if you have Internet Explorer 4.0 or later installed.

User Tracker consists of 4 components:

- 1) client component that tracks user's activity
- 2) server component that records the information from the client(s)
- 3) viewer that provides user's interface to the database and generates reports.
- 4) tools for create database.

In the case of single computer installation all three components should be installed on the computer. In the case of network installation you should install client component on every computer you want to track, server component and viewer should be installed onto the server (one dedicated computer in the LAN). If you want to track the server as well, you should also install client component on the server.

2 Installation

For setting of the complex it is necessary to do the following:

1. Install UserTracker on a computer, which will serve as main computer of the complex (normally it is administrator's computer). The software consisting of server's part of the complex, program to view collected statistics and utility for selection or creation of a database. After installation the complex server can be transferred onto any computer in the local network. Here the following should be allowed: server management, review of statistics and the latest server's errors all that can be made using UTVIEWER in that case only if both the server and the viewer are installed and run on the same computer.
2. Final setting of the complex. For these purposes the following actions should be undertaken:
 - [Create database.](#)
 - [Install UserTracker server](#)
 - Install program of clients' agents on defined computers in the local network. (Hint! For automatic start of the agents on clients' computers group policies in Active Directory Windows 2003 server, Windows 2000 server or Login Script on Novell Netware can be used.)
 - Start UTVIEWER program to review users' work statistics.

2.1 Create Database

The following database formats are currently supported:

1. [Express Mode](#)

Database is saved as Microsoft Access format.

This mode is recommended to home users or to small office networks consisting of no more than 50 computers. The mode is easy to set, no special ability is required.

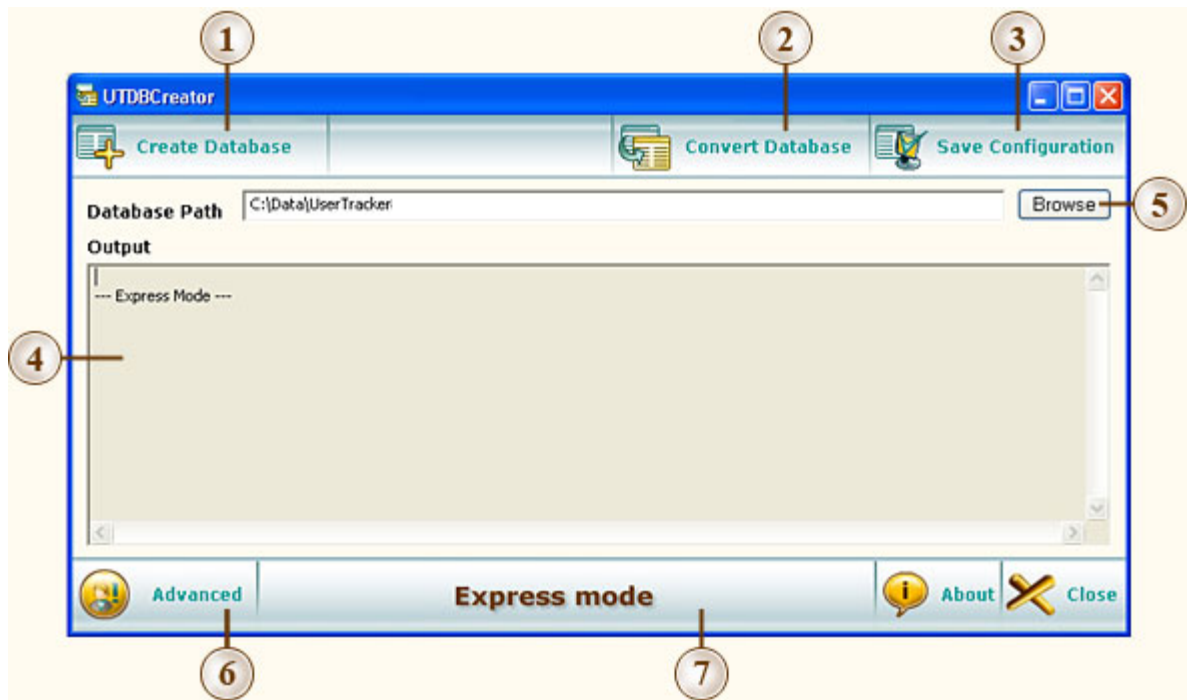
2. [Advanced Mode](#)

This mode should be used if the database is stored on SQL server or special settings of a connection to the database in Microsoft Access format is required. Standard distributive of UserTracker SQL edition consists components of MSSQL 2000 or later versions. It is possible to use earlier MSSQL versions, although complete compatibility has not been tested yet. It is possible to use other widely used SQL servers, Oracle, in particular, though its working ability and cost of a complex for specific server should be quantified. This format of a database intends the use of individual SQL server, which can be installed either on local computer or on any computer of the local network. Setting of the complex requires special ability to create a database and to define parameters for a database connection.

2.1.1 Create Database in Express Mode

Creation of a database in Microsoft Access format ([Express Mode](#)) - is recommended to home users or to small office networks consisting of no more than 50 computers. The mode is easy to set, no special ability is required

1. Run utility UTDBCreator.exe. The screenshot is given on the picture



1. Creation of a database by assigned path. During the creation defined parameters are saved as well. Don't worry if the database on indicated path already exists, missing tables will be created. Existing data will not be lost.
2. Conversion of the database from UserTracker v.1.xxx format.
3. Saving of defined parameters, in this case the database is not created.
4. Field for data output.
5. Button for selection of a folder for the database location. For saving results item 1 or item 3 should be selected.
6. Button for changeover to <Advanced mode>. Use of the button is recommended to "Advanced users".
7. Indicator of currently used mode.

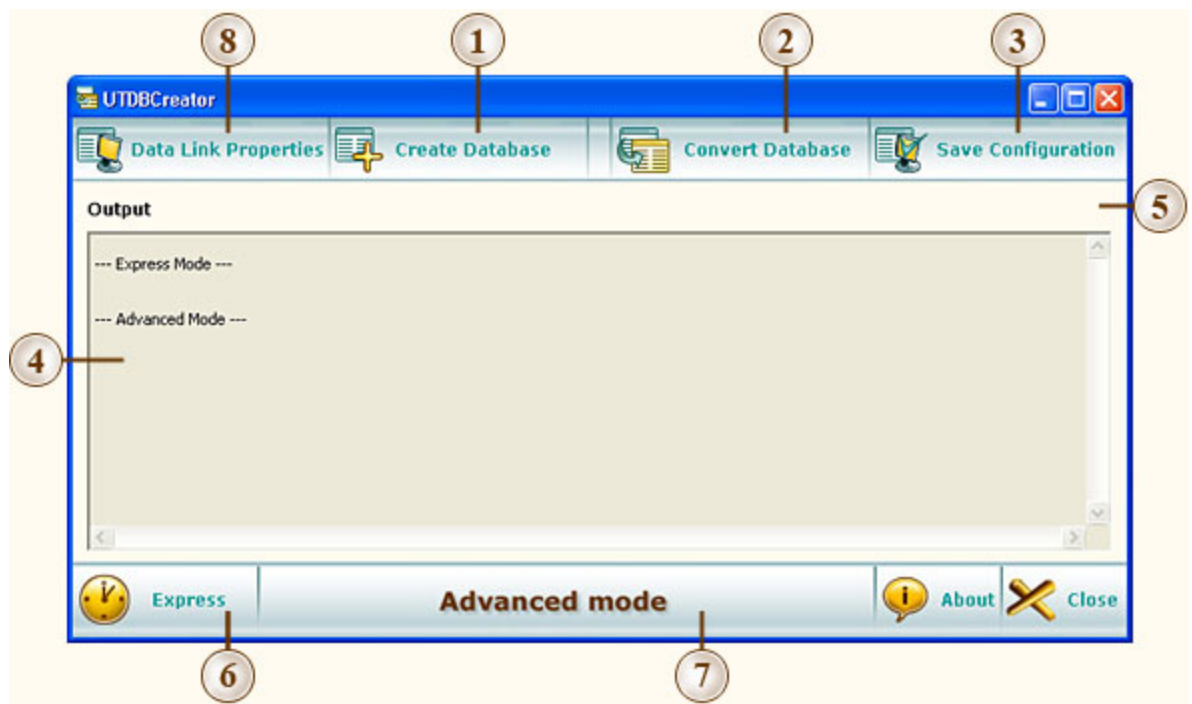
If screen view differs from that given on the picture press button "6" in order to changeover to necessary mode. If the mode is correct indicator "7" will look like on the picture.

2. Select a folder intended for location of created database. In most cases default settings can be used and selection of a folder is not necessary. If you still want to create a folder for the database, which will differ from default settings, press button "5", select necessary folder in open dialog box.
3. Create the database using assigned path by pressing button "1". Results will be seen in the output field "4". If errors occur when creating the database it is necessary to examine them, eliminate causes of their appearance and repeat the procedure.
4. If selection of existing database is necessary open the dialog box by pressing button "5" and select folder for location of existing database. The database must be saved in UserTracker v.2 format. For work with the database saved in UserTracker v.1.x format [initial conversions of the database](#). must be made. For a database creation or opening of existing database with non-typical name or for working with SQL server all procedures must be performed in "[Advanced Mode](#)".

2.1.2 Create Database in Advanced Mode

This operating mode should be used if the database is stored on SQL server or special settings of a connection to the database in Microsoft access format is required. Standard distributive of UserTracker SQL edition consists components of MSSQL 2000 or later versions. It is possible to use earlier MSSQL versions, although complete compatibility has not been tested yet. It is possible to use other widely used SQL servers, Oracle, in particular, though its working ability and cost of a complex for specific server should be quantified. This format of a database intends the use of individual SQL server, which can be installed either on a local computer or on any computer of the local network. Setting of the complex requires special ability for a database creation and defining parameters for a connection to the database

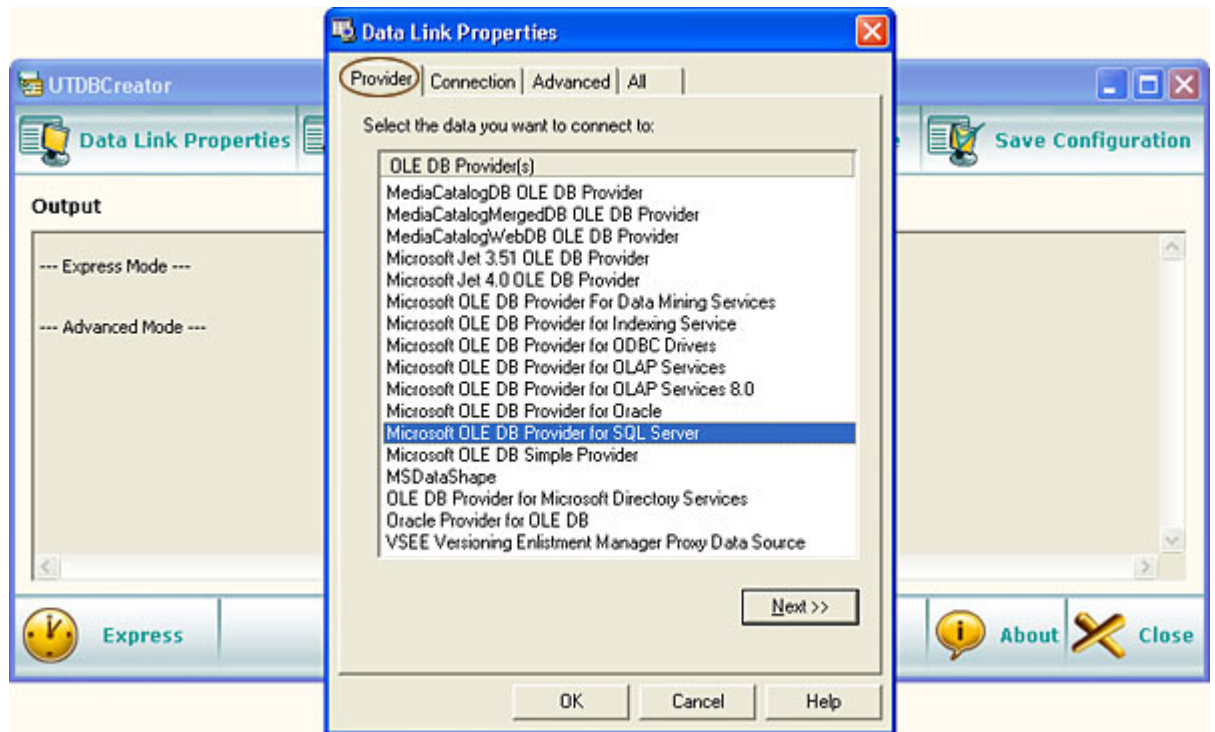
1. Run utility UTDBCcreator.exe. The screenshot is given on the picture.



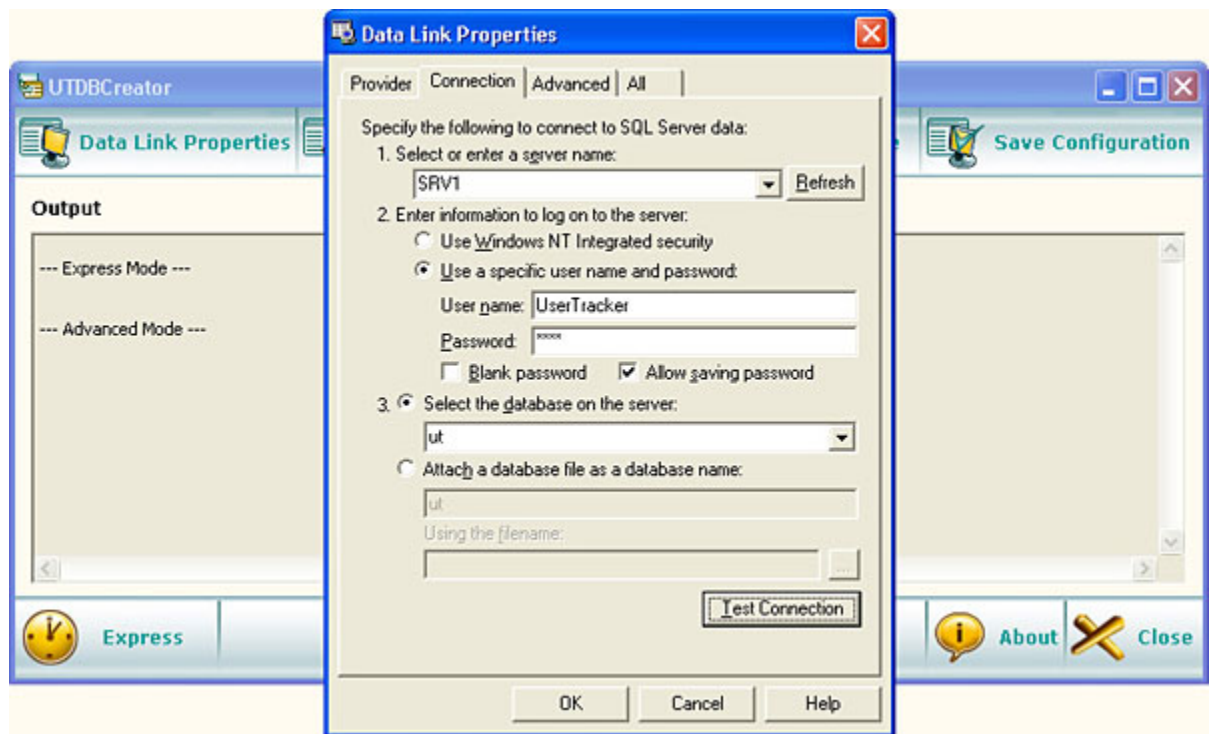
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3. Saving of defined parameters, in this case the database is not created.
4. Field for data output.
6. Button for changeover to <Advanced mode>. Use of the button is recommended to "Advanced users".
7. Indicator of currently used mode.
8. Settings of a connection to the database.

If screen view differs from that given on the picture press button "6" in order to changeover to necessary mode. If the mode is correct indicator "7" will look like on the picture.

2. Setting of parameters for a connection to the database.
 - To locate the database on SQL server the following actions should be undertaken:
 - Create a database with defined name (for example, UserTracker) on the SQL server.
 - If necessary create a user for work with the database.
 - Assign a user proper rights of work with the database (e.g. "owner", "reading", "recording").
 - Open the dialog box for setting of parameters for connection to the database using button "8" UTDBCcreator utility.
 - Select "Microsoft OLE DB Provider for SQL Server" on the **Provider tab** to work with MSSQL.



- Set necessary parameters for a connection to the database on the **Connection tab**.
 - Server name.
 - If necessary select a user for work with the database, and user's password. It is requested to mark CheckBox "Allow saving password".
 - Select a database with which UserTracker will work.
 - Check operability of given parameters.
 - Confirm given parameters by pressing button "OK".



- Create necessary tables in the selected database by pressing "1". The results are seen in the output field "4". If errors occur it is necessary to examine them, eliminate causes of their appearance and repeat the procedure.
- Initial [conversion of the database](#) created in UserTracker is necessary.

2.1.3 Convert DataBase

If you used UserTracker v.1.x and now you want to save collected statistics conversion of a database is necessary . You can convert it into Microsoft Access format or into a database created and located on SQL server.

In the former case conversion is recommended to start using "Express Mode".
In the latter case conversion is started in "Advanced Mode".

Though conversion procedures are similar in both modes, dialog boxes for the selection of a new database location are different.

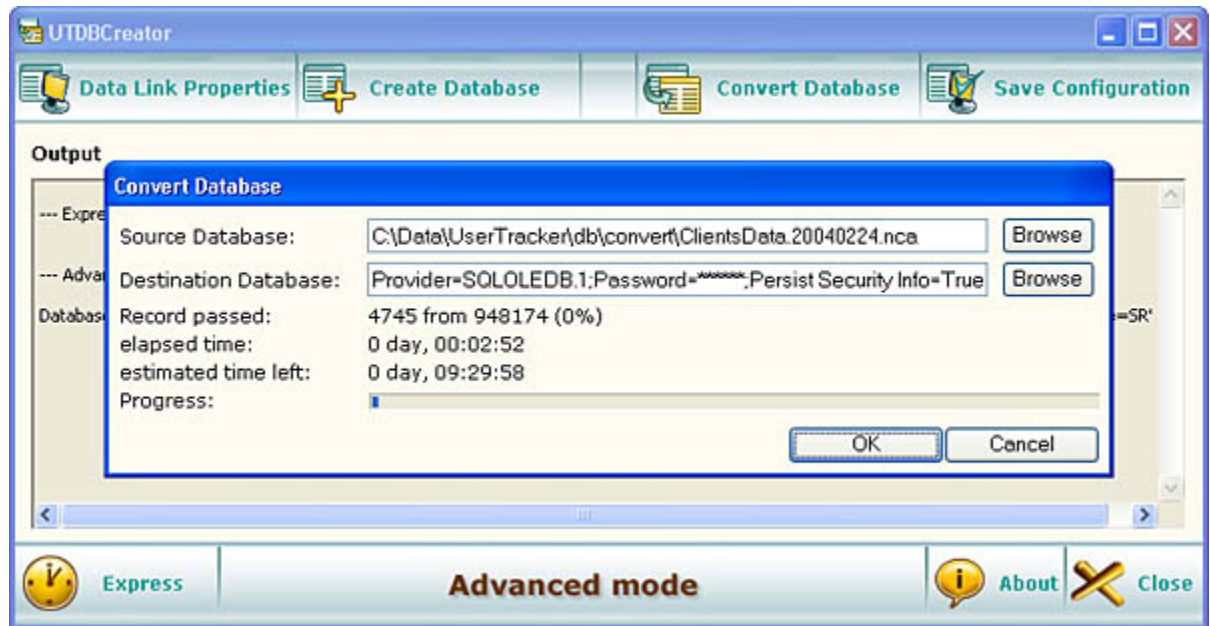
- **Conversion into existing database:**

If the database in UserTracker v.2 format is unavailable, it must be created. You can use ["Express Mode"](#) or ["Advanced Mode"](#) to create the database.

- When button "2" "Convert DataBase" is pressed the dialog box opens in the main window . Do the following:
 - Specify the database in UserTracker v.1.x (Source Database) format.
 - Specify the database in new UserTracker v.2 (Destination Database) format.

- Start conversion.

Pattern of the conversion procedure is given on the screenshot:



Conversion can be performed into an initially empty database or into that with records. During conversion it is unnecessary to stop UserTracker Server. The repeated conversion into the same database will be performed correctly. Data will not be replicated.

2.2 UserTracker server install

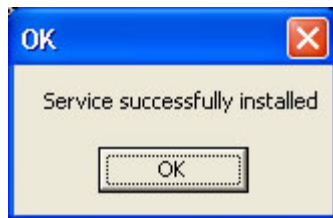
The server should be installed on a computer under Microsoft Windows XP / Windows 2003 / Windows NT operating systems. The server cannot be installed on a computer under Microsoft Windows 9x or Microsoft Windows ME (The restriction is not applied to clients' workplaces).

If the server of the complex was not installed or if it must be installed on another computer in the local network the following should be done:

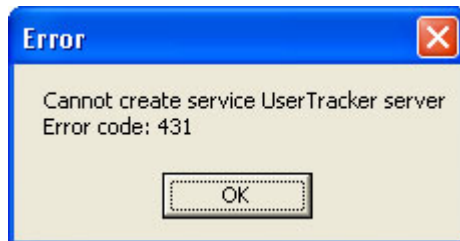
1. Log on the computer intended for server installation and operation using an Administrator account.
2. Create a new folder for installation, for example, "C:\Program Files\UserTracker" and copy file "UTServer2.exe" to this folder.
 - Important! The folder intended for server installation must not be used as network disk, subst disk or removable disk, otherwise operability of the complex can be damaged.
3. Open created folder and on command line type "UTServer.exe /install".

"UTServer.exe /install".

If installation is successful the following message is displayed:



4. If during installation errors occur (server has already been installed or a user doesn't have permission to install the program) the following message is displayed:



In that case causes of errors should be analyzed and installation should be repeated.

5. By default, the server accepts incoming connections from clients on TCP port 5860. If the port number should be changed start installation of the server with parameter "/p=port" , where "port" is any numerical value from 1 to 65535.
Advanced users only can change "default port".

Pattern of server installation with defined port number 2000:

"UTServer.exe /install /p=2000".

Keep in mind that port number for the server and clients should be higher than 1024 otherwise work of the server and client's computers is impossible. If default port number should be changed get advice of your local network administrator.

6. If the used port number should be changed or a server should be uninstalled stay at the program folder and undertake the following actions:

"UTServer.exe /remove"

The command stops and uninstalls server. If the procedure completes successfully you should get the following message:



- If during uninstalling procedure errors occur, you will get an error message. The error should

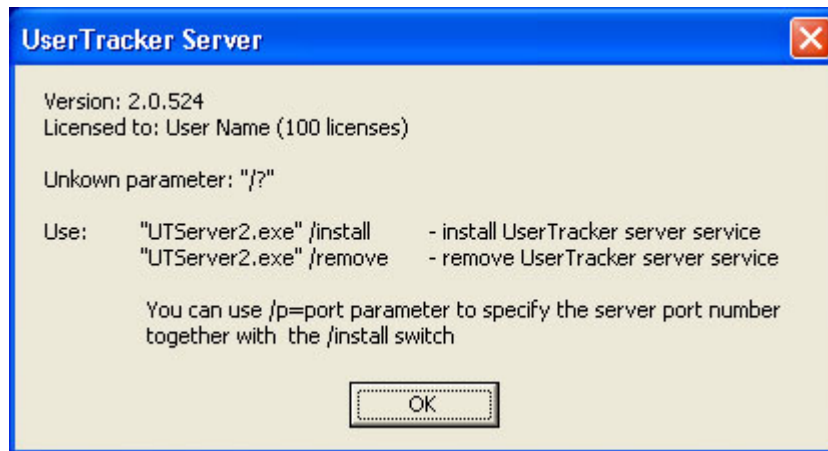
be analyzed and the procedure should be restarted.

- If the repeated installation of the server is necessary, after uninstalling perform item 3 to install the server with standard parameters and item 5 to install the server with another TCP port number.

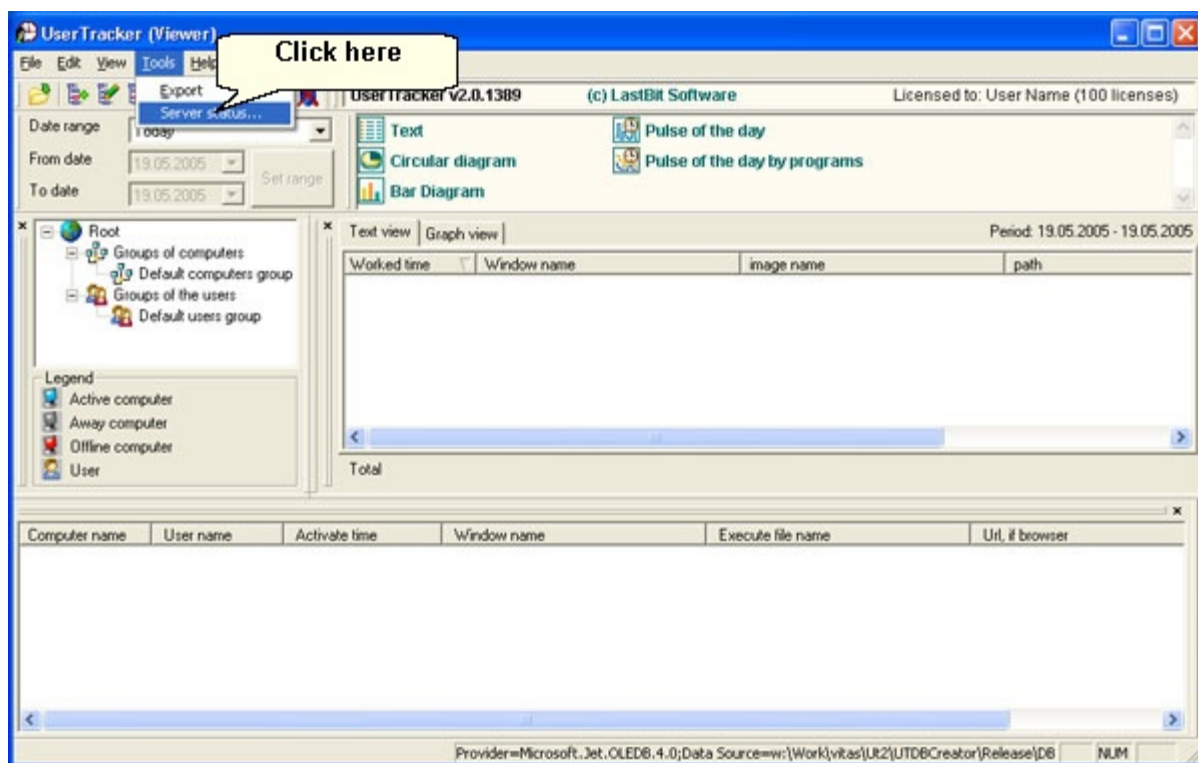
7. To display all possible installation parameters stay at the program folder and do the following:

"UTServer.exe /?"

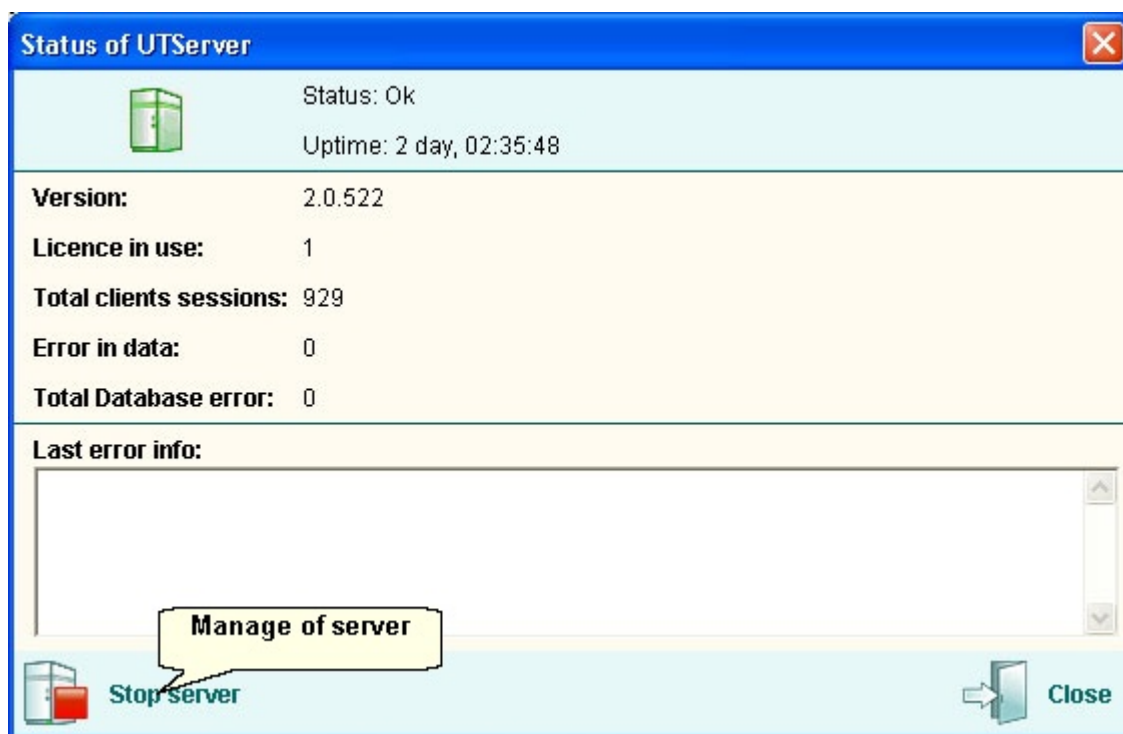
The following message is displayed:



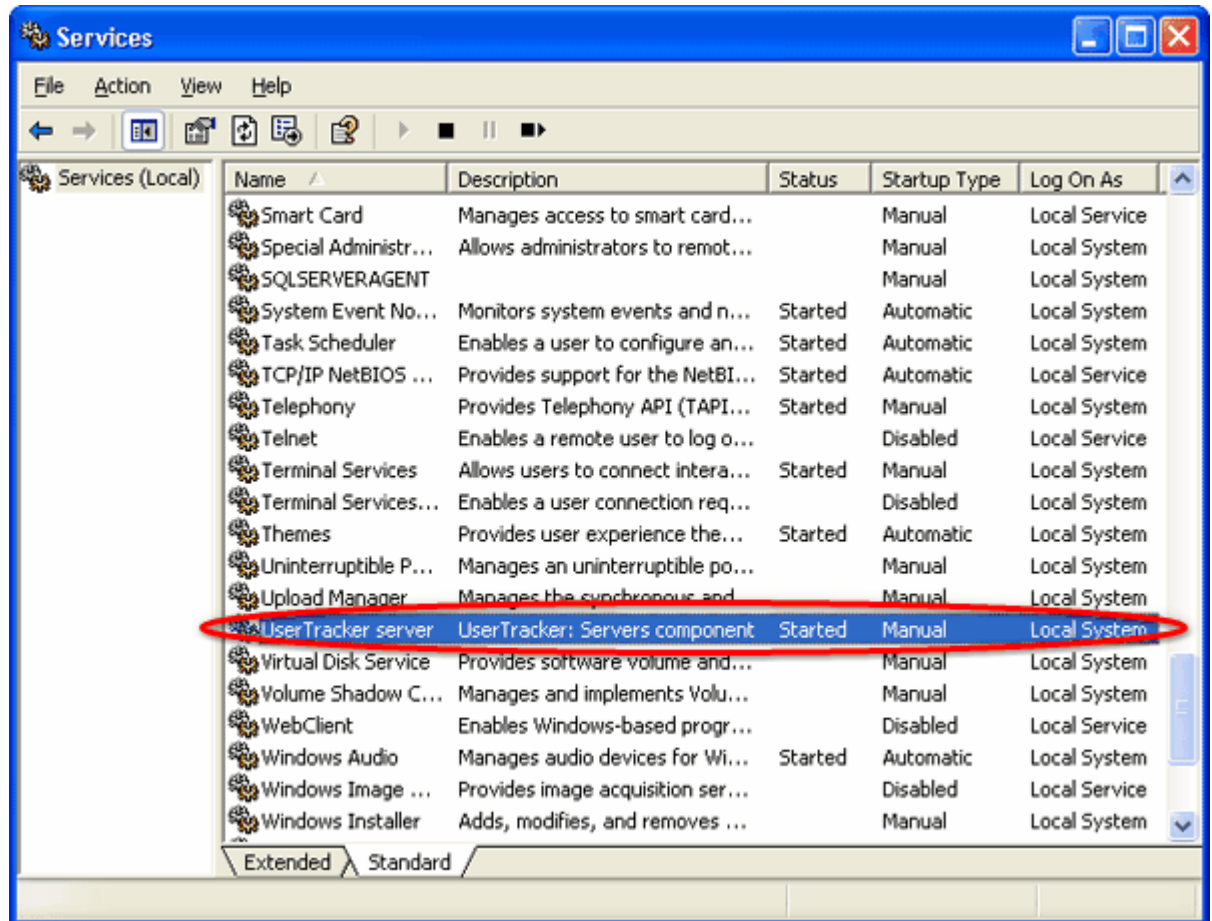
8. After installation and restarting of a computer the server will start automatically. It is possible to manage the server (start, stop) manually by two ways:
- If the server and UserTracker (Viewer) are installed on the same computer it is necessary to start program of statistics review and choose Tools and then "Server status..." as it is shown on a screenshot:



After this procedure a window opens, in this window you can stop and start server operation. Information about the latest errors of the server operations and statistics are displayed in the same window.



- Though the second way gives a user more possibilities for server management, extra skills for management of Microsoft Windows Services are required. In that case Standard Windows application - Services is required for server management. To use the application for server management you should find in it string "UserTracker server" and make necessary settings.



When changing default start parameters keep in mind that UserTracker server should be started under system account or under user's name with permission to modify registry subtree "HKEY_LOCAL_MACHINE\SOFTWARE\YVG\UserTracker", otherwise partial or complete damage of server operability is possible.

2.3 Installation of agents on clients' computers

In order clients' computers and server can exchange information on a computer intended for collecting statistics client's program must be installed. Client's workplace can be installed by two ways:

1. Personal installation. Complex is installed on a personal workplace. It is normally used on a home computer and in small working groups. The installation on a client's computer must be made under administrator's account.
2. Centralized installation. It's the optimal choice. The centralized settings are made on one computer. In order it can be usable in your local network Active Directory or Novell Network must be installed.

Personal installation

Client program is installed on a personal workplace of a complex. It is usually used on a home computer or in small working groups. The installation on the client's computer must be made under administrator's account.

UserTracker clients program Version: 2.0.405

ip address:

(home and single computer users should use 127.0.0.1)

TCP port:

run clients program:

- [UTCInt.exe] to use this screen;
- [UTCInt.exe /start] to use with saved properties;
- [UTCInt.exe ip=< UTServer_ip_address > port=< UTServer_TCP_port >] to use with specified parameters

(c) LastBit Software

In the field "ip address" the ip address of a computer with downloaded server's complex should be indicated. If a server and a User Tracker client are on the same computer the address can be used by default (127.0.0.1).

The field "TCP port" should contain the same port number as the complex server. Otherwise transfer of data to the server is impossible.

After pressing "OK" input data are saved and client's program is installed.

Centralized installation.

If Active Directory or Novell Network is installed in your local network centralized installation of the program can be made with Startup Scripts (if Active Directory is installed) or Login Script (if Novell Network is installed).

The following string should be inserted in the script:

```
UTCInt.exe /start ip=UTServer_ip_address port=UTServer_TCP_port
```

where: ip and port are not obligatory parameters. If one or both of them do not exist parameters given to server's complex (if a server and a User Tracker client are on the same computer) or those saved for personal installation or default parameters will be used.

UTServer_ip_address - ip address of a computer with installed complex server.

UTServer_TCP_port - TCP port number, it must contain the same port number as the complex server.

Keep in mind that for correct agent installation on clients' computers it may be necessary to assign the path to the executable file and set necessary access rights.

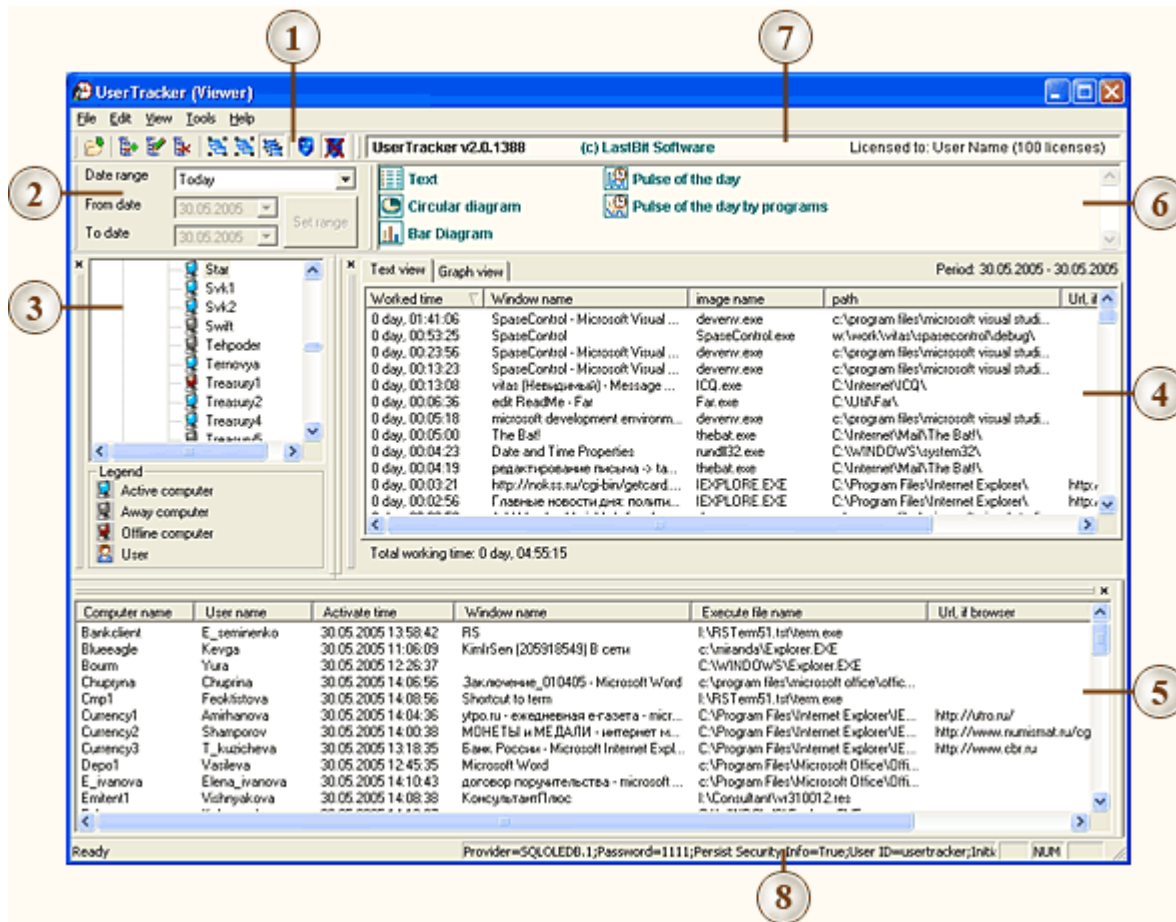
3 Statistics review

For review of collected statistics program UserTracker Viewer is used. Executable file is "UTViewer.exe".

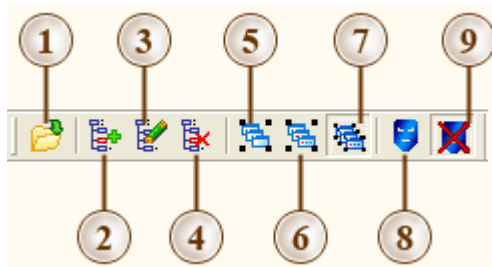
The program main window is divided into several panes, in which information is reviewed and parameters for review are defined.

Computers and users can be included in different groups. It allows to review building up statistics by specific groups of computers.

Screenshot of the main window is shown on the picture.



1. Data view modes toolbar



1. Opening of the database for review.
2. Creation of a clients' group.
3. Changing of a group's name.
4. Deleting of an empty users' group.
5. Grouping by the name of an executable file. When activating the option summarized statistics for used programs is displayed.
6. Clustering by projects names. When activating the option a cluster formed by a part of window name is added to a cluster formed by executable file name. Beginning of the window name to the first substring "-" is taken into account.
7. No grouping. When activating the option additional grouping is not performed. All records are displayed.
8. Display executable files names by "Aliases". When activating the option text name of the program, which is inside the most of executable files, is used as a name of the executable file. This mode usually facilitates identification of launched programs.
9. Display of executable files by the name used by operating system.

2. Selection of the period of statistics display

In the window the period of statistics display is defined. When selecting the period keep in mind that if large period is defined statistics displaying is much more slower.

3. Reviewed object selection

Tree-like list displayed in the window shows information about groups, computers and users. Statistics for individual computer or a user as well as for the group of computers or users can be displayed. For viewing statistics for specific object click the necessary icon (a computer, a user, a group). If you want to know a computer's "ip address" and a name of its user navigate cursor to a specified computer and tool-tip appears.

4. Window for review of selected object statistics

In the object statistics window information about jobs done on a computer, group of computers, by individual user or group of users is displayed. Report view will depend on selection in the **List of objects "3"** and the state of buttons of a cluster **ToolBar "1"**. Statistics can be displayed either in text format or as graphs. Switching from one of review modes to another can be made by selection of the proper icon. Graphs can be displayed as a pie chart or bars.

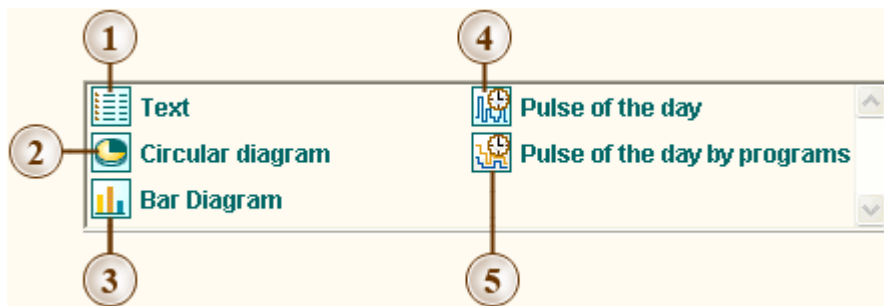
5. Users' current work monitoring

Information about the latest jobs on all monitored computers is displayed in the window for monitoring of user's current work. Since information about all users is displayed in the window, it can be used for preliminary analysis and identification of objects for more accurate analysis. It is possible to sort the list, for example by users, and trace the work of individual user on several computers or under strange account, as well as trace the work of a user who should not have an access to a specific computer.

6. Advanced statistics report

Reports in the window are displayed in html format, they can be saved and printed. At the time of

issue of the documentation the following html reports are included in the standard program package.



1. Text report.
2. Pie chart report.
3. Bar report.
4. Daily time-table of a computer usage.
5. Daily time-table of a computer usage specified by launched programs.

It is possible to use other types of reports by your request, they will be realized in further program releases. If the company considers it unreasonable inclusion of the reports in the produced package, your query will be solved in the frames of special project. Though the cost will increase.

7. Information about version number and license

If indicator "Demo Version" is displayed in the window "User Tracker Server" and "User Tracker User" programs of the complex will operate with limited functionality. To get access to all functions of the complex it must be registered. Registration is made from the program of statistics review User Tracker Viewer.

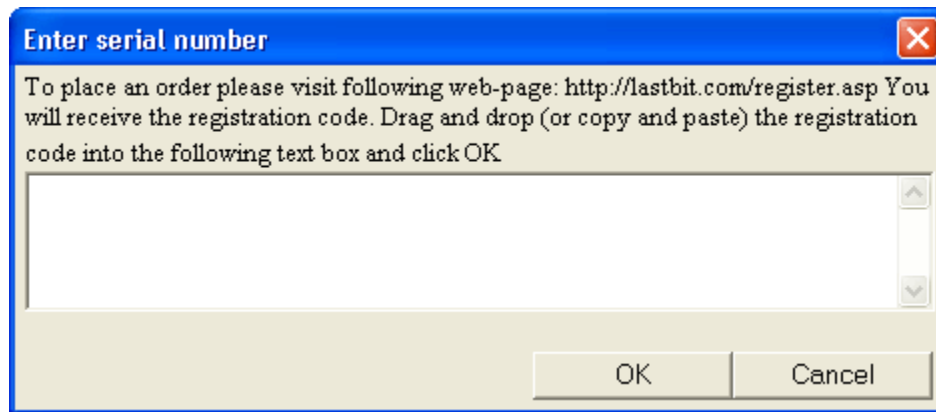
8. Information of current database and parameter for connection

4 Licensing

If indicator "Demo Version" is displayed in the license window "User Tracker Server" and "UserTracker Viewer" programs of the complex will operate with limited functionality. To get access to all functions of the complex it must be registered. Registration is made from the program of statistics review User Tracker (Viewer).

The following actions should be undertaken for registration:

- Log on computer using an Administrator account.
- Start "UserTracker (Viewer)" program (executable file - UTViewer.exe).
- Select **Help** -> **Enter serial number** in the main menu. The following window is displayed:



- In the input field enter your registration key which got when purchasing the program, press "OK". If registration has completed successfully or incorrectly you get proper messages.
- To activate license you should restart the server part of the complex and review statistics program.

If server and review statistics program are installed on different computers, complete the following actions for server licensing:

- 1) Copy files "UTViewer.exe" and "lbsu.dll" onto the computer with UserTracker Server installed.
- 2) Follow the registration procedure described above.