## **Guardant Net Client**

The client application needs to register on the dongle server in order to start operation. The network client calls Guardant Net on start up and continues running only upon its successful registration on the server.

The client searches for the server both with the use of built-in GrdAPI mechanisms and also using the **GnClient.ini** configuration settings file: broadcast search and indication of a direct IP address.

Broadcast search is on in the **GnClient.ini** configuration file by default. In this mode the client sends periodic broadcast queries (datagrams) over the network upon startup. The Guardant Net server meeting the set dongle search parameters responds to the queries. Broadcast search mode can significantly lower the client registration time on the Guardant Net server, especially in Win32 applications.

In some cases, however, it is necessary to indicate the IP address of the computer on which the dongle is installed and the server is running.

In the process of receiving responses from the server the client generates a list of the server's attributes (name and host IP address, NetBIOS server name).

Server search with a Win32 client takes less time than with DOS or Win16 clients:

- When the time allocated for sending queries lapses, DOS and Win16 clients will subsequently try to setup communication with each discovered server until one of them accepts the client. If the client fails to register on any servers discovered via broadcasting, or no servers have been discovered, the client will setup communication with the server, the parameters of which are recorded in the GNCLENT.ini file (IP\_NAME, NB\_NAME).
- With Win32 applications, the process of adding the NetBIOS name by LANA, the broadcast search by datagrams, and direct search by GnClient. ini settings are performed simultaneously. Once the first Guardant Net server is found, the client tries to establish a connection with it, and if it is successful, terminates all parallel processes except the process of adding the NetBIOS name, which cannot be stopped. Then the client receives the license and completes the registration.

With a large number of clients the load on the network and the dongle's server significantly increases. In this event, it is recommended to install several dongles and Guardant Net servers. The server response time depends on the load: a server with a lower load at the time responds sooner. Thus, the dongle's server loading is automatically balanced.