Mask verification

Mask verification:

/UM[=[0x]m]

Dongle type:

Any

Parameter value:

Description:

If a software product consists of several independent program modules, you can use option **/UM** for its protection. This option allows selectively permitting or restricting the user to run specific modules of the software complex.

For example, a machine translation system consists of three programs: MyProg1.exe – demo version with limited features, MyProg2.exe – English-German translator and MyProg3.exe – French-English translator.

The demo version is meant for wide distribution and other translators can be purchased optionally, i.e. when customers need them. The use of **/UM** option simplifies distribution of such software product.

Applications protected in this mode use the dongle mask field as a set of semaphores, each of which restrict or permit the launch of a program with a number assigned in the process of protection setting up. During the start the program checks the value of the respective bit in the dongle mask field and launches the application if it equals 1.

You should assign a number for each protected application using **/UM** option (it can be in decimal or – with the use of "0x" prefix – hexadecimal format). For instance, MyProg1.exe gets number 1, MyProg2.exe – number 2 and MyProg3.exe – 4, since 1 corresponds to bit #0, 2 – bit #1 and 4 – bit #2.

Number 1 is written into **Mask** field of the dongle.

In this case you can include all three applications into the distribution package. However, the client will be able to launch only MyProg1.exe, since the mask field of its dongle contains the value corresponding only to the number of this application (i.e. 1).

If a client is also willing to use MyProg2.exe, he will be able to correct the mask value of its dongle using the information submitted to him by the developer via the remote update utility and write number 3 into the mask. Now he will be able to launch not only MyProg1.exe but also MyProg2.exe since bits #0 and #1 correspond to number 3 written in the dongle.

The dongle mask field size is 16 bits. While setting the protection it is recommended to choose numbers corresponding to a unique bit, i.e. 1, 2, 4, 8, 16, 32, 64, etc. Assigning other numbers may lead to a failure while checking the mask.

Example:

NwKey32.exe /GS3S /UM=1 MyProg1.exe

NwKey32.exe /GS3S /UM=2 MyProg2.exe

NwKey32.exe /GS3S /UM=4 MyProg3.exe

Calls of Guardant Sign dongle application protection utility are shown here for the example described above.