WHAT IS CLAIMED IS:

1. A method for realizing a plurality of applications in an information security device, comprising:

compiling, by a terminal, a written application program to obtain an intermediate code file corresponding to the written application program;

performing, by the terminal, a security verification on the intermediate code file;

storing, by the terminal, the intermediate code file passing the security verification;

receiving, by the terminal, a request for downloading application programs sent by the information security device;

obtaining, by the terminal, at least two intermediate code files corresponding to two application programs requested to be downloaded according to the request for downloading application programs;

sending, by the terminal, the at least two intermediate code files corresponding to two application programs to the information security device;

receiving and storing, by the information security device, the at least two intermediate code files corresponding to two application programs;

receiving, by the information security device, a first executive command; and

executing, by an intermediate code interpreter in the information security device, an intermediate code file corresponding to an application program indicated by the first executive command, wherein the intermediate code file is configured to call an application program interface of the information security device to control hardware of the information security device.

2. The method according to claim 1, wherein data storage spaces in the information security device are configured to store the at least two intermediate code files corresponding to two application programs in isolation.

3. The method according to claim 1 or 2, before receiving by the information security device the first executive command, further comprising:

receiving, by the information security device, a first activating instruction; and

activating, by the information security device, an intermediate code file corresponding to an application program indicated by the first activating instruction;

wherein executing by an intermediate code interpreter in the information security device an intermediate code file corresponding to an application program indicated by the first executive command specifically comprises: executing, by the intermediate code interpreter in the information security device, the activated intermediate code file corresponding to the application program indicated by the first executive command.

4. The method according to any one of claims 1 to 3, wherein

during a process of executing by the intermediate code interpreter in the information security device the intermediate code file corresponding to the application program indicated by the first executive command, if a data access request is generated by the intermediate code file corresponding to the application program indicated by the first executive command, the method further comprises:

judging, by the intermediate code interpreter, whether data requested to be accessed by the intermediate code file corresponding to the application program indicated by the first executive command is authorized for the intermediate code file corresponding to the application program indicated by the first executive command;

if the data requested to be accessed is authorized for the intermediate code file corresponding to the application program indicated by the first executive command, allowing, by the intermediate code interpreter, the intermediate code file corresponding to the application program indicated by the first executive command to execute a data access; and

if the data requested to be accessed is not authorized for the intermediate code file corresponding to the application program indicated by the first executive command, refusing, by the intermediate code interpreter, to let the intermediate code file corresponding to the application program indicated by the first executive command execute a data access.

5. An information security device for realizing a plurality of applications, comprising:

a sending module, configured to send a request for downloading application programs to a terminal;

a receiving module, configured to receive from the terminal at least two intermediate code files corresponding to two application programs requested to be

downloaded, and to receive a first executive command, wherein the at least two intermediate code files corresponding to two application programs are obtained by the terminal by compiling written application programs and performing security verifications;

a storage module, configured to store the at least two intermediate code files corresponding to two application programs, and

an intermediate code interpreter, configured to execute an intermediate code file corresponding to an application program indicated by the first executive command, wherein the intermediate code file is configured to call an application program interface of the information security device to control hardware of the information security device.

6. The information security device according to claim 5, wherein data storage spaces in the storage module are configured to store the at least two intermediate code files corresponding to two application programs in isolation.

7. The information security device according to claim 5 or 6, wherein

the receiving module is further configured to receive a first activating instruction;

the information security device further comprises:

an activating module, configured to activate an intermediate code file corresponding to an application program indicated by the first activating instruction;

the intermediate code interpreter is specifically configured to execute the activated intermediate code file corresponding to the application program indicated by the first executive command.

8. The information security device according to any one of claims 5 to 7, wherein

the intermediate code interpreter is further configured to judge whether data requested to be accessed by the intermediate code file corresponding to the application program indicated by the first executive command is authorized for the intermediate code file corresponding to the application program indicated by the first executive command, to allow the intermediate code file corresponding to the application program indicated by the first executive command to execute a data access if the data requested to be accessed is authorized for the intermediate code file corresponding to the application program indicated by the first executive command, and to refuse to let the intermediate code file corresponding to the application program indicated by the first executive command execute a data access if

the data requested to be accessed is not authorized for the intermediate code file corresponding to the application program indicated by the first executive command.

9. An information security system for realizing a plurality of applications, comprising:

a terminal, configured to compile a written application program to obtain an intermediate code file corresponding to the written application program, to perform a security verification on the intermediate code file, to store the intermediate code file passing the security verification, to receive a request for downloading application programs sent by an information security device, to obtain at least two intermediate code files corresponding to two application programs requested to be downloaded according to the request for downloading application programs, and to send the at least two intermediate code files corresponding to two application programs to the information security device; and

the information security device, configured to send the request for downloading application programs to the terminal, to receive and store the at least two intermediate code files corresponding to two application programs, to receive a first executive command, wherein an intermediate code interpreter in the information security device is configured to execute an intermediate code file corresponding to an application program indicated by the first executive command, and the intermediate code file is configured to call an application program interface of the information security device to control hardware of the information security device.

10. The information security system according to claim 9, wherein data storage spaces in the information security device are configured to store the at least two intermediate code files corresponding to two application programs in isolation.

11. The information security system according to claim 9 or 10, wherein

the information security device is further configured to receive a first activating instruction, and to activate an intermediate code file corresponding to an application program indicated by the first activating instruction;

the intermediate code interpreter in the information security device is specifically configured to execute the activated intermediate code file corresponding to the application program indicated by the first executive command.

12. The information security system according to any one of claims 9 to 11, wherein

the intermediate code interpreter in the information security device is further configured to judge whether data requested to be accessed by the intermediate code file corresponding to the application program indicated by the first executive command is authorized for the intermediate code file corresponding to the application program indicated by the first executive command, to allow the intermediate code file corresponding to the application program indicated by the first executive command to execute a data access if the data requested to be accessed is authorized for the intermediate code file corresponding to the application program indicated by the first executive command, and to refuse to let the intermediate code file corresponding to the application program indicated by the first executive command execute a data access if the data requested to be accessed is not authorized for the intermediate code file corresponding to the application program indicated by the first executive command.

13. An information security device for realizing a plurality of applications, comprising:

one or more processors;

a memory;

one or more programs stored in the memory, wherein when being executed by the one or more processors, the one or more programs are configured to:

send a request for downloading application programs to a terminal;

receive from the terminal at least two intermediate code files corresponding to two application programs requested to be downloaded, wherein the at least two intermediate code files corresponding to two application programs are obtained by the terminal by compiling written application programs and performing security verifications;

store the at least two intermediate code files corresponding to two application programs;

receive a first executive command; and

execute an intermediate code file corresponding to an application program indicated by the first executive command, wherein the intermediate code file is configured to call an application program interface of the information security device to control hardware of the information security device.

14. The information security device according to claim 13, wherein data storage spaces are configured to store the at least two intermediate code files corresponding to two application programs in isolation.

15. The information security device according to claim 13 or 14, wherein when being executed by the one or more processors, the one or more programs are further configured to:

receive a first activating instruction; and

activate an intermediate code file corresponding to an application program indicated by the first activating instruction;

the one or more programs are further configured to execute an intermediate code file corresponding to an application program indicated by the first executive command by a step of executing the activated intermediate code file corresponding to the application program indicated by the first executive command.

16. The information security device according to any one of claims 13 to 15, wherein when being executed by the one or more processors, the one or more programs are further configured to:

judge whether data requested to be accessed by the intermediate code file corresponding to the application program indicated by the first executive command is authorized for the intermediate code file corresponding to the application program indicated by the first executive command;

allow the intermediate code file corresponding to the application program indicated by the first executive command to execute a data access if the data requested to be accessed is authorized for the intermediate code file corresponding to the application program indicated by the first executive command, and refuse to let the intermediate code file corresponding to the application program indicated by the first executive command execute a data access if the data requested to be accessed is not authorized for the intermediate code file corresponding to the application program indicated by the first executive command.