

What is claimed is:

1. A method for downloading a program having at least one file from at least one service terminal to a user terminal, the at least one file comprising a file of a first type and a file of a second type, the method comprising the following steps of:

segmenting the file of the first type into a first plurality of file blocks, segmenting the file of the second type into a second plurality of file blocks, and arranging the first plurality of file blocks and the second plurality of file blocks according to a read order of the program, wherein the first plurality of file blocks include a first file sub-block, the second plurality of file blocks include a second file sub-block;

transmitting the first file sub-block to the user terminal; and

executing the first file sub-block at the user terminal before the second file sub-block is transmitted to the user terminal.

2. The method according to Claim 1, further comprising one of the following steps of:

executing the first plurality of file blocks and the second plurality of file blocks according to the read order when the first plurality of file blocks and the second plurality of file blocks have been stored in a memory at the user terminal; and

when the first plurality of file blocks and the second plurality of file

blocks have not been stored in the memory at the user terminal, executing the first plurality of file blocks and the second plurality of file blocks in the memory according to the read order after the first plurality of file blocks and the second plurality of file blocks are downloaded into the memory at the user terminal by way of a multi-threaded mode from the at least one service terminal closest to the user terminal.

3. The method according to Claim 1, wherein the read order is determined based on the used times of the first plurality of file blocks and the second plurality of file blocks, the read order is further determined based on an read sequence of the first plurality of file blocks and the second plurality of file blocks had been read when the used times are the same, and the read order of the file blocks with more used times is prior to the read order of the file blocks with less used times.

4. The method according to Claim 1, wherein the at least one file includes an execution file, a dynamic-link library (DLL) file, a resource file, and any combination thereof;

the execution file includes the first file block, and one of the resource file and the dynamic-link library file includes the second file block;

the memory includes a virtual hard disk to store the program.

the user terminal externally connects to an mobile hard disk to store the program to enable the user terminal to directly execute the program in the mobile hard disk according to the read order.

~~the user terminal externally connects to an mobile hard disk to store~~
the program and an embedded operating system to enable the user terminal
to directly execute the program in the mobile hard disk according to the
read order without using an internal operating system at the user terminal;
and

the at least one file is compressed at the service terminal and
decompressed at the user terminal to increase an amount of data to be
transmitted.

5. A method for downloading a program having a plurality of files, wherein
the plurality of files are downloaded one by one from a service terminal to
a user terminal, and the plurality of files comprise at least a first file and a
second file, the method comprising the following steps of:

provising a first file sub-block of the first file and a second file sub-
block of the second file;

transmitting the first file sub-block from the service terminal to the
user terminal; and

executing the first file sub-block at the user terminal before the second
file sub-block is transmitted from the service terminal to the user terminal.

6. The method according to Claim 5, wherein:

the first file includes an execution file while the second file includes
a resource file; and

the method further comprises one of the steps of:

~~executing the first file when the first file has been stored in a~~

memory at the user terminal; and

downloading the first file into the memory at the user terminal from a service terminal closest to the user terminal when the first file have not yet been stored in the memory at the user terminal; and the plurality of files include an execution file, a dynamic-link library (DLL) file and a resource file;

the memory includes a virtual hard disk for storing the program;

the user terminal externally connects to an mobile hard disk to store the program to enable the user terminal to directly execute the program;

the user terminal externally connects to an external mobile hard disk to store the program and an embedded operating system to enable the user terminal to directly execute the program without using an internal operating system at the user terminal; and

the plurality of files are compressed at the service terminal and decompressed at the user terminal to increase an amount of data to be transmitted.

7. A method for downloading a program having an execution file and a resource file from a service terminal to a user terminal, the execution file comprising a plurality of file sub-block, the method comprising the following steps of:

transmitting the execution file from the service terminal to the user terminal;

executing a first file sub-block of the plurality of file sub-blocks at

~~the user terminal before the plurality of file sub-blocks in the execution file~~
have not yet been completely downloaded to the user terminal, and
acquiring a part of data of the resource file when an execution of the first
file sub-block needs a support from the part of data from the resource file
to continue the execution; and

continuing to execute a first file sub-block of the plurality of file sub-
blocks when the part of data has been acquired from the service terminal.

8. The method according to Claim 7, further comprising one of the
following steps of:

executing the execution file at the user terminal when the execution
file has been stored in a memory at the user terminal; and

when the execution file has not yet been stored in the memory at the
user terminal, executing the execution file after the execution file is
downloaded into the memory at the user terminal from a service terminal
closest to the user terminal;

the memory comprises a virtual hard disk to store the program;

the user terminal externally connects to an mobile hard disk to store
the program to enable the user terminal to directly execute the program;

the user terminal externally connects to a mobile hard disk to store the
program and an embedded operating system to enable the user terminal to
directly execute the program without using an internal operating system at
the user terminal; and

~~the plurality of files are compressed at the service terminal and~~

~~decompressed at the user terminal to increase an amount of data to be transmitted.~~

9. A method for downloading a program having a plurality of execution files and a plurality of resource files, wherein each of the plurality of execution files is segmented into a plurality of execution sub-blocks, and each of the plurality of resource files is segmented into a plurality of resource sub-blocks to enable the plurality of execution sub-blocks to be downloaded from a service terminal to a user terminal for execution, the method comprising the following steps of:

transmitting a first execution sub-block of the plurality of execution sub-blocks from the service terminal to the user terminal, wherein an execution of the first execution sub-block needs a support from a specific resource block of the plurality of resource sub-blocks;

transmitting the specific resource sub-block from the service terminal to the user terminal to complete the pre-execution of the first execution sub-block; and

continuing transmitting a second execution sub-block of the plurality of execution sub-blocks to the user terminal when the service terminal has completed transmitting the specific resource sub-block.

10. The method according to Claim 9, further comprising one of the following steps of:

executing the first execution sub-block at the user terminal when

~~the first execution sub-block has been stored in a memory at the user~~

terminal, and executing the second execution sub-block at the user terminal when the second execution sub-block has been stored in the memory at the user terminal; and

when the first execution block and the second execution sub-block have not yet been stored in the memory at the user terminal, executing one of the first execution sub-block and the second execution sub-block after either of the first execution sub-block and the second execution sub-block is downloaded into the memory at the user terminal from a service terminal closest to the user terminal where there are plural service terminals;

the memory includes a virtual hard disk to store the program;

the user terminal externally connects to an mobile hard disk to store the program to enable the user terminal to directly execute the program;

the user terminal externally connects to an mobile hard disk to store the program and an embedded operating system to enable the user terminal to directly execute the program without using an internal operating system

at the user terminal; and

the plurality of files are compressed at the service terminal and decompressed at the user terminal to increase an amount of data to be transmitted.

What is claimed is:

1. A method for downloading a program having at least one file from at least one service terminal to a user terminal, the method comprising the following steps of:

segmenting the at least one file into a plurality of blocks, and arranging the plurality of blocks according to a particular read order of the program, wherein the plurality of blocks include a first block and a second block;

transmitting the first block to the user terminal; and

executing the first block at the user terminal before the second block is transmitted to the user terminal.

2. The method according to Claim 1, further comprising one of the following steps of:

executing the plurality of blocks from the second block according to the particular read order when the plurality of blocks have been stored in a memory at the user terminal; and

when the plurality of blocks have not been stored in the memory at the user terminal, executing the plurality of blocks in the memory according to the particular read order after the plurality of blocks are downloaded into the memory at the user terminal by way of a multi-threaded mode from the at least one service terminal closest to the user terminal.

3. The method according to Claim 1, wherein the particular read order is determined based on a number N of times each block in the plurality of blocks is to be used, a block having a larger N has a prior read order prior to that of another block having a smaller N, and the particular read order is determined based on an original read order when the plural blocks have the same N.
4. The method according to Claim 1, wherein the at least one file includes an execution file, a dynamic-link library (DLL) file, a resource file, and any combination thereof.
5. The method according to Claim 4, wherein the execution file includes the first block, and one of the resource file and the dynamic-link library file includes the second block.
6. The method according to Claim 1, wherein the user terminal includes a memory having a virtual hard disk to store the program.
7. The method according to Claim 1, wherein the user terminal electrically connects to an external mobile hard disk to store the program to enable the user terminal to directly execute the program in the mobile hard disk according to the particular read order.
8. The method according to Claim 1, wherein the user terminal electrically connects to an external mobile hard disk to store the program and an embedded operating system to enable the user terminal to directly execute the program in the mobile hard disk according to the particular read order without using an internal operating system at the user terminal.

9. The method according to Claim 1, wherein the at least one file is compressed at the service terminal and decompressed at the user terminal to increase an amount of data to be transmitted.

10. A method for downloading a program having a plurality of files, wherein the plurality of files are downloaded one by one from a service terminal to a user terminal, and the plurality of files comprise at least a first file and a second file, the method comprising the following steps of:

transmitting the first file from the service terminal to the user terminal; and

executing the first file at the user terminal before the second file is transmitted from the service terminal to the user terminal.

11. The method according to Claim 10, wherein:

the first file includes an execution file while the second file includes a resource file; and

the method further comprises one of the steps of:

executing the plurality of files from the second file when the plurality of files has been stored in a memory at the user terminal; and

downloading the first file into the memory at the user terminal from a service terminal closest to the user terminal where there are plural service terminals when the plurality of files have not yet been stored in the memory at the user terminal.

12. The method according to Claim 10, wherein the plurality of files

include an execution file, a dynamic-link library (DLL) file and a resource file.

13. The method according to Claim 10, wherein the user terminal includes a memory having a virtual hard disk for storing the program.

14. The method according to Claim 10, wherein the user terminal electrically connects to an external mobile hard disk to store the program to enable the user terminal to directly execute the program.

15. The method according to Claim 10, wherein the user terminal electrically connects to an external mobile hard disk to store the program and an embedded operating system to enable the user terminal to directly execute the program without using an internal operating system at the user terminal.

16. The method according to Claim 10, wherein the plurality of files are compressed at the service terminal and decompressed at the user terminal to increase an amount of data to be transmitted.

17. A method for downloading a program having an execution file and a resource file from a service terminal to a user terminal, the method comprising the following steps of:

transmitting the execution file from the service terminal to the user terminal;

executing the execution file at the user terminal, and acquiring a part of data of the resource file when an execution of the execution file needs a support from the part of data from the resource file to continue the

execution; and

continuing to execute the execution file when the part of data has been acquired from the service terminal.

18. The method according to Claim 17, further comprising one of the following steps of:

executing the execution file at the user terminal when the execution file has been stored in a memory at the user terminal; and

when the execution file has not yet been stored in the memory at the user terminal, executing the execution file after the execution file is downloaded into the memory at the user terminal from a service terminal closest to the user terminal where there are plural service terminals;

the memory comprises a virtual hard disk to store the program;

the user terminal electrically connects to an external mobile hard disk to store the program to enable the user terminal to directly execute the program;

the user terminal electrically connects to a external mobile hard disk to store the program and an embedded operating system to enable the user terminal to directly execute the program without using an internal operating system at the user terminal; and

the plurality of files are compressed at the service terminal and decompressed at the user terminal to increase an amount of data to be transmitted.

19. A method for downloading a program having a plurality of execution

files and a plurality of resource files, wherein each of the plurality of execution files is segmented into a plurality of execution blocks, and each of the plurality of resource files is segmented into a plurality of resource blocks to enable the plurality of execution blocks to be downloaded from a service terminal to a user terminal for execution, the method comprising the following steps of:

- transmitting a first execution block of the plurality of execution blocks from the service terminal to the user terminal, wherein an execution of the first execution block needs a support from a specific resource block of the plurality of resource blocks;

- transmitting the specific resource block from the service terminal to the user terminal to complete the pre-execution of the first execution block; and

- continuing transmitting a second execution block of the plurality of execution blocks to the user terminal when the service terminal has completed transmitting the specific resource block.

20. The method according to Claim 19, further comprising one of the following steps of:

- executing the first execution block at the user terminal when the first execution block has been stored in a memory at the user terminal, and executing the second execution block at the user terminal when the second execution block has been stored in the memory at the user terminal; and

when the first execution block and the second execution block have not yet been stored in the memory at the user terminal, executing one of the first execution block and the second execution block after either of the first execution block and the second execution block is downloaded into the memory at the user terminal from a service terminal closest to the user terminal where there are plural service terminals;

the memory includes a virtual hard disk to store the program;

the user terminal electrically connects to an external mobile hard disk to store the program to enable the user terminal to directly execute the program;

the user terminal electrically connects to an external mobile hard disk to store the program and an embedded operating system to enable the user terminal to directly execute the program without using an internal operating system at the user terminal; and

the plurality of files are compressed at the service terminal and decompressed at the user terminal to increase an amount of data to be transmitted.