

[CLAIMS]

[Claim 1]

An operating method of a security server for security management of a database system comprising:

5 receiving a command related to a database managed in the database system from a client;

confirming a service state of the database system before the command is to be transmitted the database system;

10 changing a security policy for the database system when the service state of the database system is changed according to a result of checking the service state;

determining whether the command transmitted from the client satisfies the changed security policy; and

15 transmitting a request for confirming whether to execute the command to an administrator client before the command is to be processed when the command does not satisfy the changed security policy according to a result of the determination.

[Claim 2]

The operating method of a security server according to claim 1,

20 wherein the service state is classified into at least two states in accordance with a set condition, and different security policies are applied in respective states,

wherein the at least two states includes a development state and an actual service state on the basis of a service start time,

the operating method further comprising:

25 executing the command after receiving a response with respect to the request for confirming from the administrator client.

[Claim 3]

The operating method of a security server according to claim 1,
wherein the confirming confirms the service state with reference to a state flag
5 indicating the service state of the database system.

[Claim 4]

The operating method of a security server according to claim 1,
wherein the confirming confirms the service state on the basis of cumulative
10 data information stored in the database, log information on the database, and a request
state for the database system.

[Claim 5]

The operating method of a security server according to claim 1,
15 wherein the changing changes the security policy such that the client cannot use
some commands among commands related to the database.

[Claim 6]

The operating method of a security server according to claim 1,
20 wherein, when the command requests deletion, change, or inquiry of data
exceeding a reference data amount, the determining determines that the command does
not satisfy the changed security policy.

[Claim 7]

25 The operating method of a security server according to claim 1, further

comprising:

monitoring a connection and an access of the client to the database system,
generating and storing a log of information acquired through the monitoring;

analyzing a behavior pattern of the client on the basis of the log; and

5 determining whether the command transmitted from the client matches the
behavior pattern of the client.

[Claim 8]

The operating method of a security server according to claim 7,

10 wherein the log includes at least one of connection IP information, user ID
information, terminal information, application information, time information, query
information, and command information.

[Claim 9]

15 The operating method of a security server according to claim 7, further
comprising:

forcibly terminating the connection of the client when the command does not
match the behavior pattern of the client.

20 [Claim 10]

A database security server comprising:

a communication module for receiving commands related to a database managed
in a database system from a client;

a service state analysis module for confirming a service state of the database
25 system before the command is to be transmitted the database system;

a security policy management module for changing a security policy for the database system when the service state of the database system is changed;

a control module for determining whether the command transmitted from the client satisfies the changed security policy; and

5 an administrator notification module for transmitting a confirmation request for confirming whether to execute the command to an administrator client before the command is to be processed when the command does not satisfy the changed security policy.

10 [Claim 11]

The security server according to claim 10, further comprising:

a log generation module for monitoring a connection and an access of the client to the database system, generating and storing a log of information acquired through the monitoring; and

15 a behavior analysis module for analyzing a behavior pattern of the client on the basis of the log,

wherein the control module determines whether the command transmitted from the client matches the behavior pattern of the client.