CLAIMS

Claim 1. An information processing system comprising: an upper NW device being a device constituting an overlay network; and a lower NW device being a device constituting an underlay network,

wherein the upper NW device includes:

a detector that detects unauthorized communication; and

a notifier that specifies at least one of a communication destination and a communication source of the unauthorized communication detected by the detector, using information regarding the unauthorized communication, and notifies the lower NW device of at least one of the communication destination and the communication source of the unauthorized communication specified, and

the lower NW device includes:

an acquirer that acquires information related to communication of a terminal connected to the lower NW device; and

a blocker that blocks unauthorized communication based on the information regarding the unauthorized communication notification of which is provided by the notifier.

Claim 2. The information processing system according to claim 1,

wherein the blocker blocks communication to the communication destination of the unauthorized communication notification of which is provided by the notifier by using the information regarding the unauthorized communication.

Claim 3. The information processing system according to claim 1,

wherein the blocker blocks communication from the

communication source of the unauthorized communication notification of which is provided by the notifier by using the information regarding the unauthorized communication.

Claim 4. The information processing system according to claim 1,

wherein the blocker blocks communication from a NW including the communication source of the unauthorized communication notification of which is provided by the notifier by using the information regarding the unauthorized communication.

Claim 5. The information processing system according to claim 1,

wherein the notifier notifies the lower NW device of one or both of address information regarding the communication destination of the unauthorized communication detected by the detector and address information regarding the communication source of the unauthorized communication or address information regarding an NW including the communication source of the unauthorized communication, as the information regarding the unauthorized communication, and

the blocker uses the address information notification of which is provided by the notifier to perform blocking of one or both of communication, that is, blocking of communication to the communication destination of the unauthorized communication, and blocking of communication from the communication source of the unauthorized communication or blocking of communication from the NW including the communication source of the unauthorized communication.

Claim 6. The information processing system according to claim 5,

wherein, in response to a request from a user of an own system, the notifier notifies the lower NW device of one or both of the address information regarding the communication destination of the unauthorized communication and the address information regarding the communication source of the unauthorized communication or the address information regarding the NW including the communication source of the unauthorized communication.

Claim 7. The information processing system according to claim 5,

wherein the notifier notifies the lower NW device of either the address information regarding the communication source of the unauthorized communication detected by the detector or the address information regarding the NW including the communication source of the unauthorized communication in accordance with the information regarding the unauthorized communication.

Claim 8. An information processing method to be executed by an upper NW device being a device constituting an overlay network, and a lower NW device being a device constituting an underlay network, the information processing method comprising:

an acquisition process of acquiring, by the lower NW device, information related to communication of a terminal connected to the lower NW device;

a detection process of detecting, by the upper NW device, unauthorized communication;

a notification process of specifying, by the upper NW device, at least one of a communication source and a

communication destination of the unauthorized communication detected by the detection process by using information regarding the unauthorized communication, and notifying the lower NW device of at least one of the communication source and the communication destination specified; and

a blocking process of blocking, by the lower NW device, the unauthorized communication notification of which is provided by the notification process based on the information regarding the unauthorized communication.

Claim 9. A computer-readable recording medium storing therein an information processing program causing a computer functioning as an upper NW device being a device constituting an overlay network, and a computer functioning as a lower NW device being a device constituting an underlay network, to execute a process comprising:

the information processing program causing the computer functioning as the upper NW device to execute:

a detection step of detecting unauthorized communication; and

a notification step of specifying at least one of a communication destination and a communication source of the unauthorized communication detected by the detection step, using information regarding the unauthorized communication, and notifying the lower NW device of at least one of the communication destination and the communication source of the unauthorized communication specified,

the information processing program causing the computer functioning as the lower NW device to execute:

an acquisition step of acquiring information related to communication of a terminal connected to the lower NW device; and

a blocking step of blocking the unauthorized communication notification of which is provided by the

notification step based on the information regarding the unauthorized communication.