SUMMARY OF THE INVENTION

TECHNICAL PROBLEM

[0005]

There are a plurality of measures against security risks, such as vulnerabilities existing in hardware or software or threats caused by external attacks, in general, and the security administrator selects an appropriate measure for each apparatus from the plurality of measures and executes the measure. However, each apparatus for which measures should be taken usually operates under a different environment. Therefore, it may be difficult for the security administrator to select an "appropriate measure" simply by providing a measure against the vulnerability.

[0006]

Embodiments of the present invention provide a technique for assisting the selection of an appropriate measure from a plurality of measures for an apparatus having a security risk.

SOLUTION TO PROBLEM

[0007]

According to a first aspect of the present invention, there is provided an information processing apparatus including: an identification unit that identifies a kind of operation information corresponding to a measure applicable to an apparatus to be managed having a security risk by using measure information indicating the measure applicable to the apparatus to be managed having the security risk and definition information defining a correspondence relationship between the kind of operation information of the apparatus to be managed and the measure against the security risk; an acquisition unit that acquires operation information of the identified kind; and a display processing unit that displays the acquired operation information in association with the measure applicable to the apparatus to be managed having the security risk on a display apparatus.

[0008]

According to a second aspect of the present invention, there is provided an information processing apparatus including: a definition information distribution unit that distributes definition information, which defines a kind of operation information of an apparatus to be managed for each measure against a security risk, to an external management apparatus.

[0009]

According to a third aspect of the present invention, there is provided a security management system including a management apparatus and a server apparatus. The server apparatus includes: a definition information distribution unit that distributes definition information, which defines a kind of operation information of an apparatus to be managed for

each measure against a security risk, to an external management apparatus. The management apparatus includes: an identification unit that identifies a kind of operation information corresponding to a measure applicable to an apparatus to be managed having a security risk by using measure information indicating the measure applicable to the apparatus to be managed having the security risk and the definition information; an acquisition unit that acquires operation information of the identified kind; and a display processing unit that displays the acquired operation information in association with the measure applicable to the apparatus to be managed having the security risk on a display apparatus.

[0010]

According to a fourth aspect of the present invention, there is provided a security measure providing method performed by a computer, the method including: identifying a kind of operation information corresponding to a measure applicable to an apparatus to be managed having a security risk by using measure information indicating the measure applicable to the apparatus to be managed having the security risk and definition information defining a correspondence relationship between the kind of operation information of the apparatus to be managed and the measure against the security risk; acquiring operation information of the identified kind; and displaying the acquired operation information in association with the measure applicable to the apparatus to be managed having the security risk on a display apparatus.

[0011]

Disclosed herein is a security information distribution method performed by a computer, the method including: distributing definition information, which defines a kind of operation information of an apparatus to be managed for each measure against a security risk, to an external management apparatus.

[0012]

According to a fifth aspect of the present invention, there is provided a non-transitory computer readable medium storing a program causing a computer to execute a method, the method including: identifying a kind of operation information corresponding to a measure applicable to an apparatus to be managed having a security risk by using measure information indicating the measure applicable to the apparatus to be managed having the security risk and definition information defining a correspondence relationship between the kind of operation information of the apparatus to be managed and the measure against the security risk; acquiring operation information of the identified kind; and displaying the acquired operation information in association with the measure applicable to the apparatus to be managed having the security risk on a display apparatus.

[0013]

Disclosed herein is a program causing a computer to function as: a definition information distribution unit that distributes definition information, which defines a kind of operation information of an apparatus to be managed for each measure against a security risk, to an external management apparatus.

[0014]

According to a sixth aspect of the present invention, there is provided an information processing apparatus including a display processing unit that displays measure information, which indicates a measure applicable to an apparatus to be managed having a security risk, and operation information of a kind corresponding to the measure applicable to the apparatus to be managed, which is operation information of the apparatus to be managed and which is identified using definition information defining a correspondence relationship between the kind of operation information and the measure against the security risk, in association with each other on a display apparatus.

ADVANTAGEOUS EFFECTS OF INVENTION

[0015]

According to embodiments of the present invention, it is possible to select an appropriate measure from a plurality of measures for an apparatus having a security risk.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016]

The above-described aspects and other aspects, features, and advantages will become more apparent by preferred example embodiments described below and the following accompanying diagrams.

[0017]

FIG. 1 is a diagram conceptually showing the processing configuration of a management apparatus of a first example embodiment of the present invention.

FIG. 2 is a diagram illustrating information indicating measures applicable to each apparatus to be managed against a certain security risk (vulnerability A).

FIG. 3 is a diagram showing an example of definition information of the first example embodiment.

FIG. 4 is a diagram showing an example of information acquired by an acquisition unit.

FIG. 5 is a diagram showing an example of a screen displayed on a display apparatus by a

defines a kind of operation information of an apparatus to be managed for each measure against a security risk, to an external management apparatus.

7. A security management system, comprising:

a management apparatus; and

a server apparatus,

wherein the server apparatus comprises a definition information distribution unit that distributes definition information, which defines a kind of operation information of an apparatus to be managed for each measure against a security risk, to an external management apparatus, and

the management apparatus comprises:

an identification unit that identifies the kind of operation information corresponding to a measure applicable to the apparatus to be managed having the security risk by using measure information indicating the measure applicable to the apparatus to be managed having the security risk and the definition information;

an acquisition unit that acquires operation information of the identified kind; and

a display processing unit that displays the acquired operation information in association with the measure applicable to the apparatus to be managed having the security risk on a display apparatus.

8. A security measure providing method performed by a computer, the method comprising:

identifying a kind of operation information corresponding to a measure applicable to an apparatus to be managed having a security risk by using measure information indicating the measure applicable to the apparatus to be managed having the security risk and definition information defining a correspondence relationship between the kind of operation information of the apparatus to be managed and the measure against the security risk;

acquiring operation information of the identified kind; and

displaying the acquired operation information in association with the measure applicable to the apparatus to be managed having the security risk on a display apparatus.

9. A non-transitory computer readable medium storing a program causing a computer to execute a method, the method comprising:

identifying a kind of operation information corresponding to a measure applicable to an apparatus to be managed having a security risk by using measure information indicating the

measure applicable to the apparatus to be managed having the security risk and definition information defining a correspondence relationship between the kind of operation information of the apparatus to be managed and the measure against the security risk;

acquiring operation information of the identified kind; and

displaying the acquired operation information in association with the measure applicable to the apparatus to be managed having the security risk on a display apparatus.

10. An information processing apparatus, comprising:

a display processing unit that displays measure information, which indicates a measure applicable to an apparatus to be managed having a security risk, and operation information of a kind corresponding to the measure applicable to the apparatus to be managed, which is operation information of the apparatus to be managed and which is identified using definition information defining a correspondence relationship between the kind of operation information and the measure against the security risk, in association with each other on a display apparatus.