product supply and so on may occur at the time of system construction.

Similarly, the integrated system security design method of patent document 2 does not verify integrity between an implementation means of the security measures by the system and each component either.

Embodiments~~The object~~ of the present invention ~~is to~~ provide a security verification device and a security verification method which can solve the problems mentioned above and a program for that.

[MEANS FOR SOLVING A PROBLEM]

According to a first aspect, there is provided a security verification device ~~according to the present invention~~ includinges: a verification item storage means which stores equal to or more than one of verification items which includes at least a security function name which is information for specifying contents of security, an implementation method which is information for indicating an implementation method of said security, and parts information which includes parts identification information which is identification information of each of equal to or more than one of parts which implements said security; a function item storage means which stores equal to or more than one of function items which includes at least said parts identification information, said security function name, and an implementation means which is information for indicating an implementation means of security specified by said security function name of parts specified by said parts identification information; a requirement model generation means which, on the basis of a system requirement which is information for indicating requirements of security of a system to be verified, selects and outputs said verification item from said verification item storage means, and, on the basis of a security target model which is information for indicating a structure of a security target part of said system to be verified, generates and outputs information which indicates the requirements of security of each part which is specified by the parts identification information included in the parts information of said selected verification item; a possessed function model generation means which, on the basis of the implementation method which is included in said verification item which said

requirement model generation means selected, extracts said function item from said function item storage means, and on the basis of said extracted function item, generates and outputs information which indicates a possessed function of security of each part included in said security target model; and a verification means which performs comparison and verification of said information which indicates the requirements of security of each part and said information which indicates the possessed function of security of each part, and outputs a verification result of said comparison and verification.

According to a second aspect, there is provided a security verification method ~~according to the present invention~~ including: a computer which stores equal to or more than one of verification items which includes at least a security function name which is information for specifying contents of security, an implementation method which is information for indicating an implementation method of said security and parts information which includes parts identification information which is identification information of each of equal to or more than one of parts which implements said security, and equal to or more than one of function items which includes at least said parts identification information, said security function name and an implementation means which is information for indicating an implementation means of security specified by said security function name of parts specified by said parts identification information, on the basis of a system requirement which is information for indicating requirements of security of a system to be verified, selecting and outputting said verification item from among said stored equal to or more than one of the verification items; on the basis of a security target model which is information for indicating a structure of a security target part of said system to be verified, generating and outputting information which indicates the requirements of security of each part which is specified by the parts identification information included in the parts information of said selected verification item; on the basis of the implementation method which is included in said selected said verification item, extracting said function item from among said stored equal to or more than one of the function items; on the basis of said extracted function item, generating and outputting information which indicates a possessed function of security of each part included in said security target model; performing comparison and

verification of said information which indicates the requirements of security of each target part and said information which indicates the possessed function of security of each part; and outputting a verification result of said comparison and verification.

According to a third aspect, there is provided a non-volatile storage medium ~~according to the present invention~~ to store a program which makes a computer storing equal to or more than one of verification items which includes at least a security function name which is information for specifying contents of security, an implementation method which is information for indicating an implementation method of said security and parts information which includes parts identification information which is identification information of each of equal to or more than one of parts which implements said security, and equal to or more than one of function items which includes at least said parts identification information, said security function name and an implementation means which is information for indicating an implementation means of security specified by said security function name of parts specified by said parts identification information carry out: a process which, on the basis of a system requirement which is information for indicating requirements of security of a system to be verified, selects and outputs said verification item from among said stored equal to or more than one of the verification items; a process which, on the basis of a security target model which is information for indicating a structure of a security target part of said system to be verified, generates and outputs information which indicates the requirements of security of each part which is specified by the parts identification information included in the parts information of said selected verification item; a process which, on the basis of the implementation method which is included in said selected said verification item, extracts said function item from among said stored equal to or more than one of the function items; a process which, on the basis of said extracted function item, generates and outputs information which indicates a possessed function of security of each part included in said security target model; a process which performs comparison and verification of said information which indicates the requirements of security of each target part and said information which indicates the possessed function of the security of

each part; and a process which outputs a verification result of said comparison and verification.

[EFFECT OF THE INVENTION]

Embodiments of t~~T~~he present invention make it~~has an effect that it becomes~~ possible to verify that the elements for implementing the security measures necessary for the system can be prepared without omission.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram showing a structure of the first exemplary embodiment.

Fig. 2 is a figure showing an example of a system requirement in the first exemplary embodiment.

Fig. 3 is a figure showing an example of a security target model in the first exemplary embodiment.

Fig. 4 is a figure showing an example of a verification item database in the first exemplary embodiment.

Fig. 5 is a figure showing an example of a verification item in the first exemplary embodiment.

Fig. 6 is a figure showing an example of a requirement model in the first exemplary embodiment

Fig. 7 is a figure showing an example of a function item database in the first exemplary embodiment.

Fig. 8 is a figure showing an example of a function item in the first exemplary embodiment.

Fig. 9 is a figure showing an example of a possessed function model in the first exemplary embodiment.

Fig. 10 is a figure showing a hardware structure of the first exemplary embodiment.