Details of Technology

| Name of Technology	System for detecting and removing unknown computer viruses	IT
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Key words	unknown computer viruses, virus filter	

What kind of technology is this?

Outline

"Threat management solution" is a new technology to identify unknown computer viruses in a vast quantity of arriving executable files and realize a mechanism for automatically creating vaccines.

With a Bayesian filter, which has also demonstrated its effectiveness for spam e-mail, suspicious data is extracted from an executable file first, and then an unknown computer virus is cultured from that executable file at high speed. Finally, by monitoring and analyzing the behavior pattern specific to that virus, a vaccine is automatically created.

(1) Bayesian filter for searching unknown computer viruses
(2) Unknown virus culturing algorithm
(3) Virus automatic creation algorithm
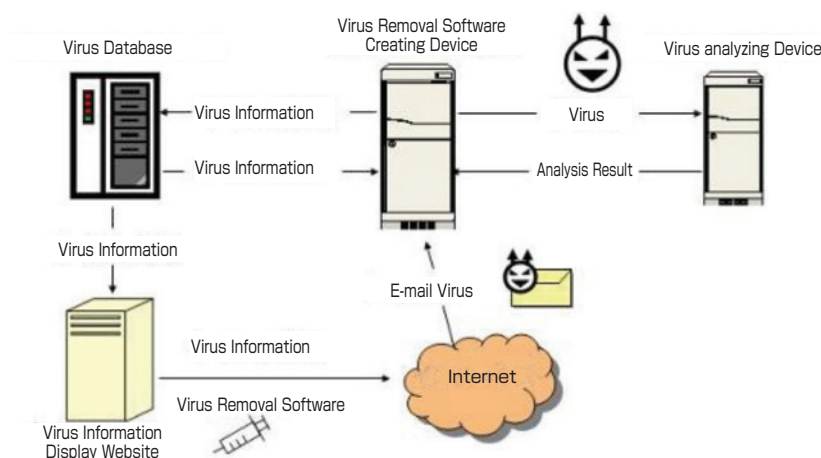
What are its applications?

This technology allows applying Bayesian filter and creating vaccines for unknown computer viruses. We can expect the commercialization of filter products that remove unknown computer viruses.

Related patents	WŌ 2005/103895
Related materials	· Huihuan Wang, Naoshi Nakaya, Ryuiti Koike, Yuji Koui, Dengfeng Zhang, Abdullah Mamun: A Performance Evaluation of Bayes Learning Algorithm For Spam Filter and Virus Filter, The First International Conference on Computer, Control and Communication (IC4 2007), Technical Session 2 no8, Nov. 2007. · Zhongda LIU, Naoshi NAKAYA, Yuuji KOUI: The Unknown Computer Viruses Detection Based on Similarity, IEICE TRANSACTIONS, Vol. E92-A, No.1, pp.190-196, Jan. 2009