As a result of recent improvements in system reliability, it is now necessary to identify the cause of any fault that might occur as quickly as possible, thus making the logging of fault analyses essential. In order to meet this need, NEC has commercialized the “WebSAM LogCollector” (hereinafter referred to as the “LogCollector”) which has the capability of performing integrated management and referencing of the logs output from multiple servers. However, due to the huge amount of logs collected with the LogCollector it has not been easy to quickly define an event causing a fault. This is because a specific knowledge of each product and practical expertise are essential to perform an effective log analysis. Therefore, we have newly developed and are now marketing a log analysis support tool called the “WebSAM LogCollector TraceAssistant” (hereafter referred to as the “TraceAssistant”) that makes it possible to quickly identify from the huge number of logs, the event that actually causes each fault, even without special knowledge of log analysis.

The TraceAssistant applies pattern analysis on the logs collected using the LogCollector by using a data mining engine, the “AccessTracer” developed at the NEC Central Research Laboratories. After the analysis, it displays the analysis results in a graph showing the scores of pattern anomalies (see Fig.). This graph can be used to focus attention exclusively on the logs containing high-scored patterns, so that the time for identifying the case can be reduced considerably from that required previously. In addition, the TraceAssistant learns the occurrence patterns of target logs and applies the results to subsequent analyses. This renders it unnecessary to register in advance the logs to be subjected to anomaly detection.

The TraceAssistant also enables detection of the system faults of previously unknown patterns, a process that has been difficult with previous knowledge-based systems. This facility considerably reduces the time required for fault cause identification.

For inquiries, please contact:

VALUMO Server Group,
1st Computers Software Division, NEC Corporation
Tel: +81(0)42-333-6443
Mail: TraceAssistant@vsg.jp.nec.com

Fig. Outline of TraceAssistant.