Distributed Application Management Tool (eASSIST) for Data Centers

When providing services in electronic commerce and other areas of eBusiness, customers must be provided with an attractive and convenient service menu that fits their current needs. It is also important, though, to provide good service quality such as in fast response time so that customers can use these services with ease.

NTT Laboratories have developed a testing and operation management system for applications constructed by core technologies like WWW, Servlet, and EJB*1 in support of eBusiness. This system aims to measure and assess the quality of the constituent elements (components) that make up an application and to isolate those sections that may create a quality bottleneck, and to automatically execute previously specified procedures in the event of a system problem.

This management system includes functions that have been used up to now in corporate systems and data centers such as usage monitoring of hardware resources like CPU*2 and memory and the monitoring of process status in currently executing programs. But it can also perform quality assessments in real time even for components on the application level, making it possible to isolate bottlenecks quickly and accurately when system quality begins to deteriorate and to take appropriate countermeasures to restore the system. This management system can be used, for example, to develop an outsourcing business for quality monitoring and operation management of applications, and to support application development (system integration business).

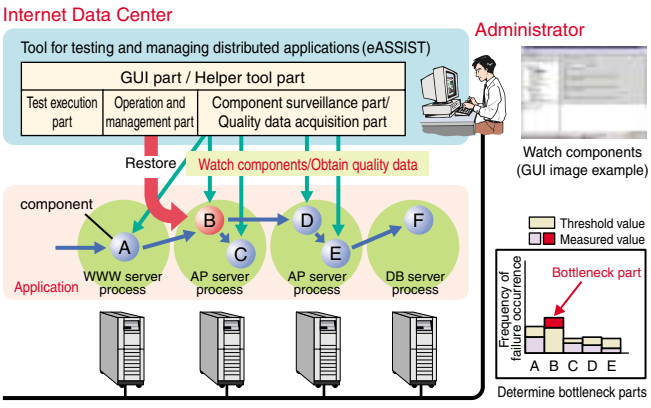
For the future, we plan to expand monitoring technology, enhance functions like reporting and automatic operation control, and achieve a quality-assessment system that can be applied seamlessly from the development (testing) stage of an application to its operation.

(Information Sharing Platform Laboratories)

*1 EJB: Enterprise JavaBeans

*2 CPU: Central Processing Unit

Tool for testing and managing distributed applications (eASSIST)



Resident Participation Environmental Information Network

The problem of individuals pursuing their own interests in opposition to the interests of the community as a whole is a social dilemma faced by our group-oriented society.

The environmental problems of recent years have changed from localized industrial pollution to spreading global issues that will continue to be problematic over the long term. Most of these issues are social dilemmas caused by the way that individuals live their daily lives. To solve these dilemmas it is necessary to deepen mutual understanding between people and cooperate with each other in the interest of the community, even if that means suppressing the pursuit of individual interests on occasions. However, as modern-day environmental problems extend across both space and time, it has been very difficult in the past for people to feel that their individual contributions have made a difference to a better environment.

Infocommunication technology is an effective means for solving this problem. We have therefore commenced research on an environmental information network that incorporates involvement from citizens. The aim of this network is to heighten interest in the lifestyle environment of every citizen and give rise to concrete actions to improve the environment. This research is being conducted as part of a joint project with Shiga Prefecture.

The following diagram is an image of the entire network. Based on the creation of a loop whereby circumstances are assessed, measures are formulated based on this assessment and action is taken, the network will be set-up in a way that allows active involvement from citizens, government authorities, corporations and experts. It will be constructed to collect, share and send information, and will center around such systems as a geographical information system.

Operation has already commenced on systems constructed to encourage the involvement of citizens, including a field note system to gather environmental information from the people and a volunteer coordination system for the exchange of information on civic activities. These systems have already been tested in a social context, put to use assisting environmental education through the creation of living creature maps, as well as environmental studies on civic activities.

(Lifestyle and Environmental Technology Laboratories)

Outline of resident participation environmental information network