Recent years have seen the promotion of video delivery services such as Video on Demand (VOD) as the “killer application” of broadband services. Some problems still remain, however, if video delivery services are to become widespread. The content holder, on the one hand, demands a mechanism that can provide robust copyright protection to prevent the unlawful use of content. The end user, meanwhile, simply wants to enjoy high-quality video content without bother. The provider of video delivery services, moreover, needs a service system that can be constructed quickly and inexpensively covering a full range of operations from content registration to copyright protection processing, content delivery, and billing and settlement.

To facilitate the early provision of video delivery services, NTT Laboratories have developed video-delivery-service software for linking the functions of the information-sharing-platforms integration environment, intellectual-property-rights management platforms, billing and settlement platform, and media distribution platform.

These developments make it possible to construct a service platform that can provide billed video delivery services with the following features.

1. Billed services in three delivery formats from MPEG-4 (384 kbit/s) to the MPEG-2 (6 Mbit/s) level: VOD, live video streaming, and video downloading.
2. Service flow spanning content registration; copyright protection by Content ID, digital watermarking, and encapsulation; content delivery, and billing and settlement.
3. Service-operation and support functions such as content management, player management, delivery management, and content sales support.
4. Software architecture that facilitates customization, functional expansion, and function selection.

For the future, NTT Laboratories plan to achieve multi-service capabilities supporting various types of video-delivery-service models and to improve and add functions of the various information sharing platforms.

(Cyber Solutions Laboratories)