Midori Denka Group (Headquarter in Amagasaki City, Japan) is a large retail chain in Japan with 92 stores (As of July 2004), which handles Home Electronic products, Audio Visual products, PCs, Furniture and Interior Decoration. Even during the period of tough competition for retail business, Midori Denka is able to grow their business through providing excellent service. Set up and installation services on the same day of purchase, 365 days repair and information services, are the unique services for the customers and they are the key factors to be the No.1 store in each region. Midori Service provides these unique services.

Midori Service has four major functions.

1) Logistics department: Deliver the product to the customer’s home, do the set up, and explain the operations of the product to the customer. Other logistics functions include delivery and inventory control of the products from the warehouse to each Midori Denka store.

2) Installation department: The main function is to install the products. Also, provide electrical works for Midori Denka store.

3) Repair department: Repair the products on site or at the repair center. This service is also extended to products purchased at other stores.

4) CS department: Provide service counter operation at Midori Denka store.

Issues before Implementation

Midori Service has service centers in 22
locations nationwide as well as a warehouse. They incurred high cost of communications between the headquarters and each of these locations. Midori Service had the following issues that became the background to start considering implementing their own voice network with IP.

1. PSTN was used for outgoing calls, which increased the communication cost.
2. PSTN was used for internal communications between the 23 sites and this also increased the communication cost.
3. Whenever the office had a move and/or layout change, internal telephone wiring was outsourced to a telephone maintenance company, which increased the cost of operation.

**Key Points to Introduce IP Telephone Network**

With these background issues, Midori Service started to consider company-wide full IP network to reduce communication cost as well as operation, move and change costs.

The key factors to introduce full IP telephone system are:

1. Utilize the 050 IP Telephone service introduced in Japan.
2. Build company-wide voice network with IP.
3. Use IP phones for all the extensions.

Many suppliers to meet these requirements were considered. However, the UNIVERGE SV7000 announced from NEC was just the solution to meet the customer’s requirements.
The following are some highlighted features of SV7000:

- The SV7000’s SIP Media Gateway (MG-SIP) provides a direct connection to 050 service.
- Various types of Media Gateway (MG) are available to connect to existing network.
- All the current available telephony service features can be carried over under the full IP system.
- Private IP Centrex operation can be designed with the SV7000 in headquarter.
- The Survivability Remote MGC (SR-MGC) provides for network backup and local operation backup.

These are the main factors evaluated to make decision to select UNIVERGE SV7000 IP Telephony System.

### System Configuration

UNIVERGE SV7000 was installed in the new headquarters and was connected to each service center via the local carrier’s IP network with security. Each service center installed IP phones and Media Gateway, controlled by the headquarter SV7000, which could eliminate the existing PBX. SV7000 is connected to 050 IP Telephone carrier network through the MG-SIP. This enables voice, through SIP, to be carried over to Carrier IP Telephony network without a loss of quality. As communication is a lifeline for a service-oriented company, each site is installed with a SR-MGC for operational back up as well as a MC-MG (COT) with Power Failure Trunk routing feature to provide a back up link to the current network.

### Benefits after Implementation

After implementation, the customer reported the following effects.

1. Through the 050 IP Telephone Service, communication cost is reduced.
2. By using private IP network for internal communication, the internal communication cost is reduced.
3. By using IP phones, office move and/or layout change telephone assignment can be done easily by the customer, reducing operation and maintenance cost.

### Future Plan

Midori Denka Group is planning to aggressively expand their chains of stores and Midori Service will have to expand their service locations and operations in order to continue to provide the high level of service and support. NEC’s UNIVERGE SV7000 is designed to be flexible enough to help Midori Service to expand their services on the IP platform, providing cost effective solutions.

NEC will continue to introduce new UNIVERGE solutions through the innovative integration of IT and network contributing effectively to the success of Midori Service and Midori Denka Group.

*050 IP Telephone service is provided by domestic carriers and available in Japan.*
UNIVERGE Products and Utilizing Images

Photo 1  Image sample of office work.

Photo 2  External view of Dterm IP phone.

Photo 3  Display image of softphone.

Photo 4  External view of SV7000.

Photo 5  External view of IX series.