DHCP Goes to Korea

by Don Cannatti, Diane McCance, Jackie Hartfiel

The Ajou University Medical Center in Suwon, South Korea, is a relatively new facility located about twenty miles from the heart of Seoul. It is a progressive hospital which has been struggling to get the most out of its vendor-furnished Hospital Information System (HIS). IRM staff there must contend with the same obstacles that frustrate private hospitals here—poor response times, fragmented applications, cumbersome modification procedures, and inflated costs. Their quest for a remedy pointed to several potential platforms and because their department head had first-hand experience with DHCP, it was among the choices. As a result, we were contacted and asked to help install Freedom of Information Act (FOIA)-obtained DHCP modules and to train a group of systems and applications programmers on the fundamentals of M and VA FileMan. The goal was to build a demo DHCP system and to provide enough basic knowledge to technical staff who could then evaluate the system to determine whether it was a viable candidate for production use.

Upon arrival, we found that three discrete PC systems had been configured with the M operating system and the FOIA software/documentation CD had been received by staff there. Our initial discussions and tour suggested that language and cultural barriers would make DHCP adaptation difficult at best.

Work commenced with loading VA Kernel and FileMan and populating the necessary files to queue jobs and to send mail messages. They were especially enthusiastic about MailMan because they had no Email facility. Quotes they had received for vendor applications compatible with their existing platform ranged from ridiculous to absurd.

Once Kernel was loaded and configured, we began installing application modules under the scrutiny of their skilled technical staff. They were quick learners whose appetite for knowledge was insatiable. As a result, impromptu classes interspersed the installation process and because of varying degrees of familiarity with the English language, often the student became the teacher who translated what he or she grasped of the lesson.

Our progress was surprising, even to us, and for a while it seemed that we would have plenty of time to achieve our objective and maybe even do a little sightseeing during the hectic 12-day trip. But midway through installation of the laboratory module, work came to a screech-

Dr. Kwak

Despite the difficulties of adapting VA FileMan to the needs of the Ajou University Medical Center in Suwon, South Korea (see DHCP Goes to Korea), Dr. Kwak, a professor at Ajou and the chairman of the Department of Clinical Pathology, has had much success in using M to build a Hospital Information System.

Yun Sik Kwak, M.D., Ph.D., graduated from medical school in Korea in 1961. He came to the U.S. to study for his Ph.D. and residency and worked in the VA system for 21 years. Twelve months ago, he retired and returned to Korea. He is now a professor and chairman of the Department of Clinical Pathology at Ajou University in Suwon.

During his tenure with the VA, Dr. Kwak became involved with M and DHCP through his work with Gordon Moorehead of the Salt Lake VA ISC. He worked on the laboratory component of the DHCP.

Through his affiliation with Ajou, Dr. Kwak discovered that the university hospital, a 900 bed facility supported by Dae Woo, the large Korean electronics manufacturer/conglomerate, was attempting to develop its information system with Ingres. The hospital had spent over $10M on the system that had totally unacceptable response times. (Note: Dae Woo programmers developed the system for the hospital and then turned it over to the hospital to run.)

Based on his DHCP experience, Dr. Kwak told the principals that an RDBMS would never be able to address the requirements of an HIS. And he was correct. It simply does not fit the model. A hospital information system is not an executive information system. Most of the system is involved with operational data handling such as order entry, results

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ing halt. The INITs for file 63, integral to DHCP lab, were not included in the FOIA release. Frantic calls were made and information exchanged in an effort to get those public-domain INITs sent across the globe as quickly as possible.

Once the process had begun, our focus shifted from installing software to training programmers and subject matter experts. Full-day classes were arranged to target all functional areas and instruction ranged from system management to application development. As time progressed, the group developed an appreciation for the overall utility of DHCP and the inherent efficiency of its integrated database. However, reservations about its eventual implementation in Korea remained because of the uncertainties surrounding its translation into the Korean language.

Those reservations minimized the frustration experienced when the FOIA shipment containing the three file 63 INITs got delayed in customs and did not get released until our last scheduled day there. As a result, the systems were not as diverse as we had hoped to provide, but they were still well-suited for their intended purpose as demo and educational systems.

It is difficult to say whether DHCP will ever be used as a production system in Korea. Though laboratory requirements are somewhat global, the Korean character set does not map to our alphabet, and the resource cost associated with translating DHCP may outweigh the benefits it provides. In any event, we left behind a solid contingent of DHCP advocates, technical as well as clinical, who will endeavor to benefit as they can from it.

The shared enthusiasm of Ajou officials for DHCP left us optimistic that if translation to an Asian character set is a viable option for DHCP, it will likely happen as a result of this effort. **M**

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reporting, etc. Very little is involved with ad hoc queries against demographic databases, etc.

Dr. Kwak brought some people from the university to Brigham and Women's Hospital and to some VA sites to prove his point. Based on the results, he was allowed to proceed to with development of an M-based HIS to replace the Ingres system.

The program is still in development but much of it is done. At this time at least 8 other hospitals are replacing their Oracle (yes, Oracle not Ingres) systems with M-based systems because of the success Dr. Kwak is having at Ajou.

Dr. Kwak started MTA-Korea by approaching corporate executives, rather than data processing personnel, with the productivity and price/performance advantage that M offers over other technologies. Of their 190 members, over 150 attended the first meeting.

-- Staff Writer --

See related article on the 1996 MTA-Korea meeting on page 43.