

# Adapt an HIS to a Changing Environment



## Background

*Note: this case study is from 1992 and is provided to give a sense of our experience. Remarkably, the upgraded HIS from this case study is still in use as of 2011.*

The client is running the Hospital Information System (HIS) provided by the medical software house where M+H principals worked before forming M+H. That software house, the Iris Health Information Systems Corp, has ceased operations. The employment agreements of the M+H principals allow M+H to provide service and software to form Iris customers. The hospital is bringing on-line a new HIS, which requires that there be a new Admission / Discharge / Transfer (ADT) system. The ADT interface for the former Iris system will need to be rewritten.

## Business Challenge

The business challenge is to preserve the Iris system functionality in a new environment quickly and cost-effectively enough to justify the client's reluctance to decommission the Iris system.

The Iris system is a typical late-1970s fixed-width, binary data system. The new ADT system is a TCP/IP-based, Health Language 7 (HL7) system.

## Solution

In order to provide a production-worthy solution as quickly as possible, we wanted the new interface to ride on top of the existing interface, since the existing interface had a decade of institutional knowledge in it.

We created a TCP/IP server to implement the HL7 network protocol and accept the real-time ADT updates as they were available. Since the Iris system is not real-time, we were able to create a daily data cleaning process to protect the Iris system from the growing pains of the new ADT system.

We created an HL7-to-legacy ADT translator, which allowed us to keep the venerable database loading process intact and to deploy quickly. We created web-based reports to allow the users to review the ADT messages to help debug the new ADT feed.

## Results

The result of the project was that the Iris system was ready to use the new ADT feed before the new ADT feed was ready, so there was no interruption of service.

Since the Iris system contained a new-to-old translator, we were able to help the client's MIS department debug their new ADT feed both during the Parallel Test and afterward.