

Health Level 7 – Laboratory Out-of-Cycle Meeting

Philadelphia, November 4 – November 8 2004

Richard Harding

Executive Summary:

This meeting was convened as part of a campaign orchestrated by Virginia Lorenzi and R Harding to create a useful V3 Pathology specification.

Seventeen people assembled outside Philadelphia for the five days. Virginia Lorenzi phoned-in on a conference phone and joined many of the sessions.

The meeting addressed some of the controversial modelling problems that had plagued V3 laboratory for several years. The solution of these problems increased the amount of work that needs to be done to have a complete V3 lab Standard that can replace HL7 version 2.x.

1. About a dozen storyboards were developed and some of these were used to validate the new data structures and trigger events etc.
2. Revisions were made to the data model also known as the static model based on feedback from early implementers. Significantly this removed the recursion that had created difficulties for the early implementers.
3. We also simplified and streamlined the dynamic model and confirmed our new basic direction at the Friday Modelling and Methodology teleconference. This work is still in its early stages.

Because of the extra work that was created by reworking the models, it is likely that another out-of-cycle meeting will be required early next year.

Reasons for the Meeting

V3 Pathology

Content in the Pathology domain of V3 has been inadequate for many ballot cycles because insufficient volunteer effort was being directed towards developing it. Prior to Atlanta, Pathology teleconferences regularly failed to attract a quorum. Virginia Lorenzi and Richard Harding submitted Ballot responses that drew attention to the poor state of V3 Pathology content relative to its peers. We also embarked on a campaign to focus volunteer attention on Pathology. This included advocating an out-of-cycle meeting where a group could be devoted full-time to developing the Pathology domain, and getting the Chair of HL7 to publicise the Pathology situation wearing a “V3 needs Path” t-shirt.

This has proven to be quite successful. The three teleconferences since Atlanta have each had seven attendees and the out-of-cycle meeting at Philadelphia had nineteen attendees.

I attended this meeting assisted by funding provided by HL7 Inc (fares and accommodation) and HL7 Australia (\$350 contribution towards out-of-pocket expenses). I was granted paid leave from Queensland Health to attend.

Work of the Meeting

V3 Pathology

The first day was spent reviewing and finalising the comments submitted at the last Ballot – Eighth Ballot. We discussed the structural changes that needed to be made to the static and dynamic models generally planned the next four days.

Day two saw us revising the dynamic model with a series of simplifications from the model that had been current for several ballot cycles. The (oversimplified) model is documented pictorially at the end of this report. We joined the Modelling and Methodology teleconference to seek endorsement for this model. Perhaps surprisingly, in the discussion that followed Gunther Schadow was an ardent supporter of this model. We then moved on to reviewing the data model and particularly its inherent recursion which had been difficult for early adopters.

For the last three days we split into three groups; one group worked on storyboards, another group started construction of the artefacts (trigger events, interactions and Application Roles) and documenting them., and the third group created the modified data model and checked this against the existing model and recent ballot comments. We used the storyboards to validate and adjust our first attempt at the artefacts.

Tour of the Quest Diagnostics Data Processing Centre:

The group was escorted through the new Quest Diagnostics data processing centre. The New York Stock exchange had encouraged Quest Diagnostics to consolidate the back-end systems of its newly-acquired laboratories and to differentiate their product from their competitors.

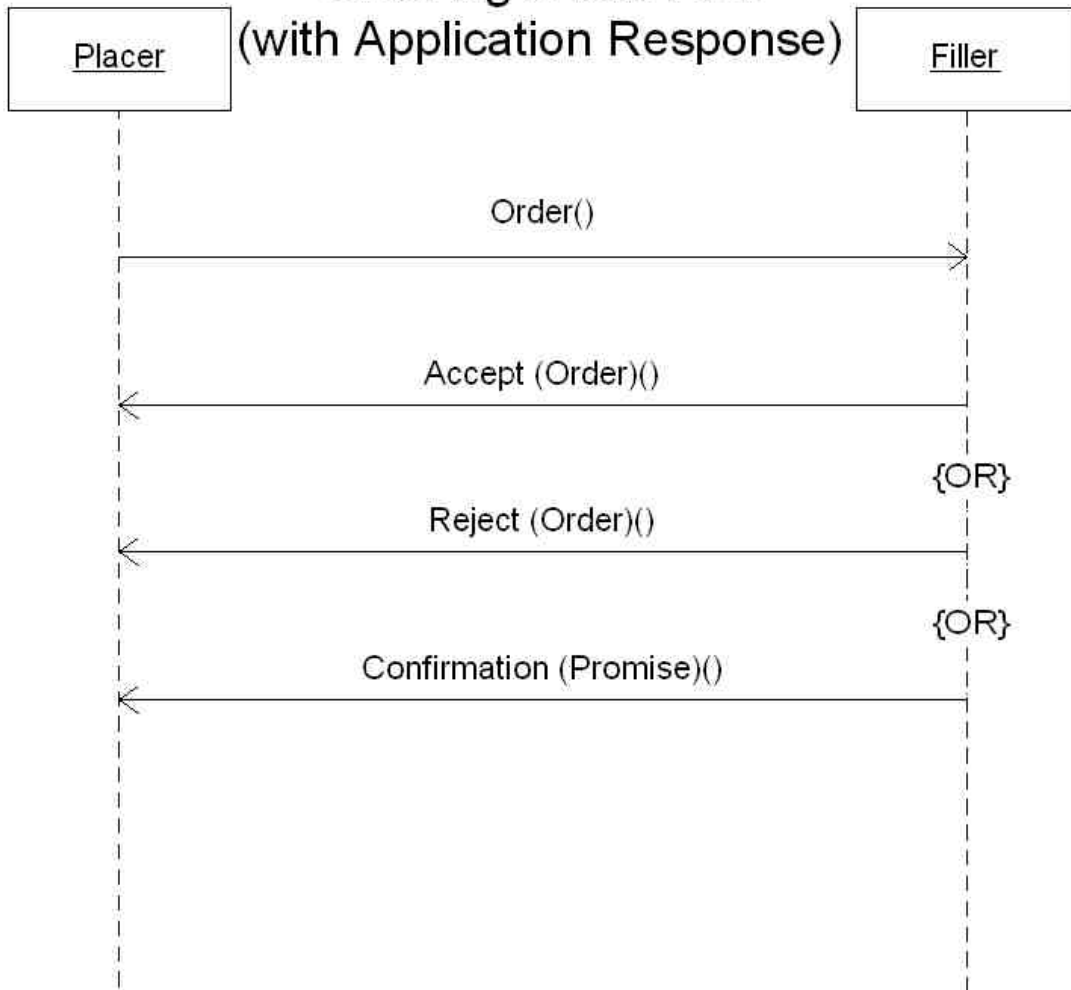
They set out to create an ultra-reliable information infrastructure following world's best practice guidelines.

The result is an impressive demonstration of a planned Data processing facility. It has a control centre where engineers can monitor the status of the applications, the network and the servers on large mimic panels.

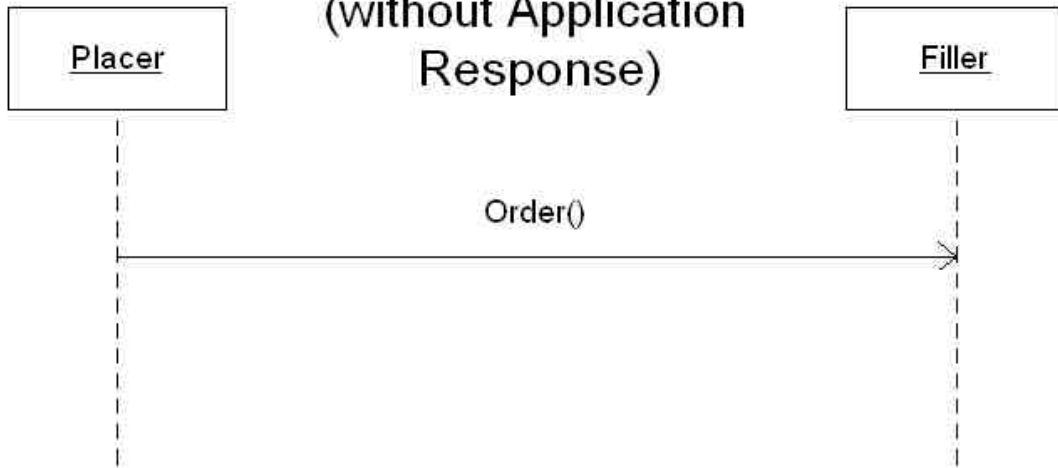
These panels can also be seen by the Help Desk operators.

The hardware has been configured using the “N plus one” paradigm, where “N” is enough hardware (eg servers, network switches, UPSs) for normal operation plus one in reserve.

Ordering a Lab Test (with Application Response)



Ordering a Lab Test (without Application Response)



Tracking an Order

