## Minutes of the COIN-OR Foundation, Inc. Strategic Leadership Board Conference Call

February 14, 2011

# 1 Scheduled Agenda

- 1. Approval of minutes for official meeting November 30, 2010.
- 2. Colocation, hardware, network, and server performance
- 3. Switch to EPL.
- 4. Progress on web site.
- 5. Members discussion
- 6. Corporate membership/sponsorship for AIMMS.
- 7. Developing a steady income stream to support hardware and software infrastructure maintenance.
- 8. COIN on social media (LinkedIn, etc.)

# 2 Minutes of the Meeting

The meeting was called to order by the President at 3:05 pm ET. In attendance: Lou Hafer, Randy Kiefer, Ted Ralphs, Paul Rubin, Matt Saltzman. Absent: Bob Fourer, Kevin Furman, Alan King, David Jensen. A quorum was present.

#### 2.1 Approval of Minutes

Motion to approve the minutes of the official meeting of November 30, 2010 (Ralphs, Saltzman) adopted (unanimous).

#### 2.2 Colocation, etc.

Information and discussion posted prior to the meeting outlined three hardware and support alternatives:

- \* Full hardware and software support provided by Clemson IT staff. This option would require the purchase of a Dell R610 server (Clemson standard equipment). The estimated cost was \$8,000 in the first year and \$2,200 in years 2 – 4 of a four-year agreement.
- \* Base hosting services provided by Clemson IT staff; additional hardware and software support provided by COIN in some manner. Purchase of a Dell R410 server (2x4-core, 8GB) with 1TB RAID1 disk storage. The estimated cost was \$2,500 for the server; \$500 for base hosting (1U rack space, continuous power and cooling, and network connection); and \$200 plus \$192/TB annual backup charge.

\* Base hosting services provided by Clemson IT staff; additional hardware and software support provided by COIN in some manner. Purchase of a Microway 4-node 2U server configuration in which an individual node comprised 2x8-core, 32GB, 1TB disk. The estimated cost was \$10,000 for the full configuration, plus the same base hosting costs at Clemson.

It was quickly established that there was broad support for hosting at Clemson, and discussion moved on to questions about hardware configuration and hardware and software support. Also generally on the table was the notion that for the cost of the full support option COIN could purchase two or more independent servers. One server could be used for production; the second would provide a development environment and a backup.

It was generally agreed that the cost of the Microway server appeared to provide better cost/ benefit than either Dell server, but a number of points would need to be clarified: could we purchase a 1U, 2-node configuration at a comparable price; were individual nodes truly independent, or did they share components; could a 1U, 2-node configuration support two independent 1TB RAID1 arrays.

Matt stated that generally systems administration was not a huge burden and that it was unclear just how much additional help Clemson staff could provide given the expertise within COIN. His observation (Clemson Math department) was that the main benefit of full support was hardware support; much of the software support still fell to him. One big exception was spam filtering on the mail server; updating spam filters was a labour-intensive chore that had to be performed on regular basis. There was discussion about alternatives and whether the amount of work could be reduced. It was reported that INFORMS staff spent quite a bit of time on mail server maintenance; also, that in reponse to an informal inquiry, INFORMS had indicated that they would be willing to explore continuing to provide this service.

It was observed that full support was an indivisible package; Clemson would require the purchase of the R610. Several directors expressed reservations that the R610 was not good value for money. More broadly, the value of the full support package was questionable for COIN.

Discussion turned to choice of operating system and the value of vendor support. Matt expressed a preference for RHEL, based on stability and familiarity with systems administration. He noted that, if COIN had access to Redhat support at present, there was at least one issue that he would take to them for resolution. Additional debate ranged over the options that opened up if we purchased two or more servers: use of CentOS on one server as a free alternative; testing (at our convenience) of updated packages not yet part of the RHEL distribution; general infrastructure support and development.

The issues of depreciation and replacement were considered. After some discussion, it was agreed that it was time COIN started to do up an annual budget and the question of establishing a fund for asset replacement was best dealt with in that budget.

Discussion concluded. The following motion was proposed (Saltzman, Rubin):

"The SLB authorises the expenditure of up to \$9,000 for the purpose of purchasing server hardware and paying for a year's hosting at Clemson."

Approved (unanimous).

Matt will explore the details, in consultation with the SLB and TLC.

#### 2.3 Other Agenda Items

There was incremental progress with respect to the switch to EPL; SYMPHONY joins the set of projects relicensed to EPL.

Progress on the associate membership policy remains coupled with the implementation of a new web site; the specific issue is automated collection of basic information (name, email, *etc.*). Matt reported that a moderated ticket plugin has been installed in an attempt to reduce ticket spam. Lou reported that he is following up on new full membership nominations from the COIN User's Meeting at the 2011 ICS Conference.

There was no news to report in regard to AIMMS, but Randy stated that he now had several identifiable expenses to point to, something that AIMMS wanted to see. The discussion slid into the question of developing a steady income stream for infrastructure maintenance. It was observed that we now had several years of financial history that provided a sound base for identifying ongoing expenses and developing a budget. Further, as an organisation we needed to consider what we wanted to do with our cash reserves. There was no point in accumulating cash without goals, and identifiable goals were helpful when approaching potential donors. Lou will write up an initial proposal for infrastructure maintenance.

Discussion moved to the topic of CLOCKSS. LOCKSS (Lots of Copies Keep Stuff Safe) is a distributed software system designed to archive digital media so that it remains available in the event of the demise of the original content provider. CLOCKSS (Controlled LOCKSS) is an alliance of academic publishers and libraries that aims to create a dark archive to preserve digital content. Portions of the archive would be made accessible in the event that the content was no longer available from the publisher. Since one of COIN's stated goals is to provide a stable archive of software for operations research, CLOCKSS might be of interest to us. This would give COIN credibility when we say our software will be available over the long term. We would need to explore a pricing model; CLOCKSS current model is based on published papers from for-profit publishers and might not be a good fit for COIN. Randy will put together a full proposal at some future date.

The social media agenda item was carried forward.

A motion to adjourn (Hafer, Kiefer) was adopted (unanimous). The conference call ended at 4:05 pm ET.

### **3** Summary of Resolutions

- \* Motion to approve the minutes of the official meeting of November 30, 2010 (Ralphs, Saltzman) adopted (unanimous).
- \* Motion to authorise the expenditure of up to \$9,000 for the purpose of purchasing server hardware and paying for a year's hosting at Clemson. (Saltzman, Rubin) adopted (unanimous).