

## Meetings at San Joaquin Delta College Stockton, California, May 23, 2006

### Background

San Joaquin Delta College is a participant and contributor to the Kualo Open Source Financial Systems Project. Lee Belarmino, Associate Vice President Technology and Chief Information Officer, is on the advisory committee for the Open Source Student Services System Planning Study. College President Raul Rodriguez supports the use of open source systems. Ralph Olstad is Director of Information Services and a contributor to the Kualo Project.

### Initial Meeting with Lee Belarmino and Ralph Olstad

Lee commented President Rodriguez is very pleased with the Kualo Project, impressed with the organization and governance of the project, and is interested in an open source student system project. He commented that President Rodriguez made a presentation on Community Source at the April 22-25, 2006 Annual Convention of the American Association of Community Colleges. Lee said Rodriguez was disappointed with the lack of interest in open source in the community colleges.

### Meeting with President Rodriguez

President Rodriguez said open source software better serves the College since, if needed, it can be modified and extended to accommodate the business processes of the college. For example, the Kualo financial system was extended to accommodate the compliance reporting required by the State of California. He is pleased with the results of the Kualo project, the leadership of the project, and the effective collaboration with others. He said it is important to have a university participate in any open source development because of the expertise and different perspectives. Sustainability is important; he judges an open source project by those colleges and universities that support the software.

He said the College no longer has the financial resources to build and maintain its own software or to install and maintain an ERP system based on the costs of other community colleges that had done so.

He recognizes that open source software requires a local skill set that may be difficult to sustain after the current staff leave. (Key staff members came from firms in Silicon Valley and are at the leading edge of software technology). IT has developed a plan to recruit talent and train locally. He agrees that many of the California community colleges do not have the same skills and may be unable to sustain open source software. (The California community colleges outsourced transcript processing saying the skills to install and maintain Linux, Apache, and Tomcat did not exist).

The President would like to participate in an open source student system development. The conditions for participation would include: support for the methods of instruction found in the College, support of California compliance reporting, leadership of the development project, a community that he believes would sustain the software after development, and technology consistent with the technology supported by the IT staff.

### Meeting with Lee Belarmino and Ralph Olstad

Lee gave a brief tour of the computer center. He described an integration that I had not found before. The student system is integrated with the heating and air conditioning control system so the temperature in any classroom is based on whether it is or will be used and when. This reduces energy consumption for the periods of time that a classroom or laboratory is not yet based on real-time information from the student system. This is an example of Lee and Ralph's insight and innovation.<sup>1</sup>

Lee said he uses Sun Microsystems computers and the Sun Solaris operating system because of the extremely high reliability and performance.

I spent most of the time with Ralph Olstad reviewing the work he had done on degree audit and prerequisites. He had developed a language to describe the rules. After developing the language, Ralph then developed the rules from the catalog text. In a few cases he found ambiguities and even a few inconsistencies that had developed in the catalog text. After developing the module he thought about using the algorithms to provide student with options—the results for different choices of academic program. So the administrative process morphed into a guidance tool for students.

He used the same technology to determine if a student satisfied the prerequisites for enrollment.

The software is documented in two well-written and complete manuals.

In summarizing the position of the College, Lee said he wanted to develop an open source student system, he would prefer to do it module at a time for early demonstration of success, and he was pleased with the architectural recommendations from the University of British Columbia's Services-oriented Architecture (SOA) Workshop. Asked about the long-term interest in open source software by his CIO colleagues, he said most or all would be Geoffrey Moore's "mainstream or laggards" letting Delta "cross the chasm" first.

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<sup>1</sup> Lee was CIO at San Joaquin Delta College while I was CIO at Los Rios Community College District. He introduced object-oriented software development, implemented real-time integration of applications, and developed the Student Education Plan during that time. Lee was a frequent contributor to the literature.