Adopted Minutes for Website Committee Conference Call

Wednesday March 13, 2013, 2:00 PM PDT

**Attendees**:

Peter Lai – CPUC

Tim Caulfield – Caulfield Consulting (Website Administrator)

Mike Guerra – SCE

Brian Smith – PG&E

Cynthia Rogers – CEC

Rob Rubin – SDG&E

Loan Nguyen - SoCalGas

**Absent:**

None

##### Executive Summary

The CALMAC Website Committee held a conference call to address the attached agenda. Main discussion covered a recently issued website usage report and a memo on the potential upgrade of website server. This discussion resulted in the decision to start the process of moving the site to a virtual shared server. The next call is scheduled for Wednesday, May 8, 2013 at 2:00 PM PST.

**Minutes of Conference Call - Call started at 2:00 PM PDT.**

* + - 1. Approve minutes:
			* January 9, 2013 Website Committee conference call – **Adopted.**
1. Regular Meeting Items
* Review Toolkit document list**. No current additions. Rob or Brian will send Tim a document that PG&E is preparing on desired content in evaluation reports when it comes out.**
1. Pending issues about the site from prior calls:
* Website statistical data – The attached website statistics report was reviewed. The following questions were raised and **Tim will see if he can get answers without too much effort**:
	+ Can we tell if people are downloading the EM&V Contractor Contact list?
	+ When people visit the Toolkit pages, can we tell if they are downloading documents from those pages?
* Alternate website hosting scenarios – The attached memo on alternates for hosting the website was discussed. The question of the long term viability of using ASP as the programming language was asked. Will it be out of date and not supported in 5 years? **Tim will follow up on this question with Jeff Yip**. [Note: Jeff responded immediately with a link to Microsoft saying that ASP will be supported for the next 10 years.]

Given all of the discussion, **the Website Committee made the decision to proceed with plans to move the site to a virtual private server and outsource the listserv function to a third party**. Several details evolved from this discussion:
	+ Tim Caulfield will write up a scope of work with costs for each phase.
	+ The Website Committee likes the current reporting setup with all results on one page, and doesn’t want to change to a paged reporting of results at this point.
	+ When changing the hosting arrangements efforts should be made to streamline processes so as to minimize the need for ongoing hours and cost by Caulfield Consulting and Third Strand.
* Draft survey of website users via Announcement Listserv – Given that we aren’t getting any complaints, and that the website traffic is increasing, the Website Committee decided to not go ahead with a survey for now. This can be revisited later if necessary.
1. New Business: - None.
2. Any Other Business - None.

Adjourn conference call at 2:40 PM. Next call is scheduled for Wednesday, May 8, 2013 at 2:00 PM PDT.

Draft Agenda for Website Committee Conference Call

2:00 PM PST, Wednesday, March 13, 2013

Dial in Number: 1 800 444 2801

Conference Code: 3515658

(No \*s or #s necessary with this code)

1. Approve minutes of January 9, 2013 Website Committee conference call. (Minutes available in the Website Committee area at the bottom of the Administration page of CALMAC.org. Direct link to this page is:

<http://www.calmac.org/events/Draft_Minutes_Website_Call_01-09-13_V1.docx>

1. Regular Meeting Items
* Review Toolkit document list. (Committee Members: Please review prior to the conference call and see if you identify any missing documents.)
1. Pending issues about the site from prior calls:
* Draft survey of website users via Announcement Listserv – On hold pending discussion of website statistical data
* Website statistical data
* Alternate website hosting scenarios
1. New Business
*
1. Any Other Business
2. Adjourn conference call. Next call Wednesday, May 8, 2013 at 2:00 PM PST.

Proposed questions for Website Survey

1. Does the site need updating? If so, suggestions?
2. What are the web pages you find most valuable?
3. Do you find the Announcements listserv useful?
4. Do you have recommendations for improvements to listserv announcements?
5. Do you have any other recommendations for improvements to CALMAC.org?

***CALMAC Website Statistics Report for 2012
February 7, 2013***

At the request of the CALMAC Website Committee, this report summarizes the CALMAC.org website statistics for 2012.

Figure 1 presents an historical view of the overall site summary statistics on an annual basis for 2009 through 2012. The results indicate that, by virtually all measures, usage of the website continues to increase. The main exception to this trend is the number of hits per session. It is believed that this is due to concentration hits on the reports search page. This is supported by Figure 3 which is discussed below.

**Figure 1. Summary Report – Annually, 2009 through 2012**



Figure 2 presents the usage statistics for the website as a whole for 2012, broken down by quarter. The total number of sessions, page views and hits grew continually during 2012, showing the same trend presented in Figure 1.

**Figure 2. Summary Report - 2012 by Quarter**



Figure 3 presents the page visits, summarized across calendar 2012. This data shows that over 90% of all page views on CALMAC.org during 2012 are for (1) searching for and viewing reports (~75%), (2) viewing information on the Toolkit and Verification Reports pages (~12%), and (3) viewing the CALMAC Home Page (~5%).

**Figure 3. Page Visits for Calendar 2012**



This information will be discussed during the next CALAMC Website Committee conference call. If additional specific information is desired please request it of Tim Caulfield in advance of the call.

March 12, 2013

To: CALMAC Website Committee

From: Tim Caulfield, Website Administrator

Re: Server Costs and Cloud Hosting

**Background**

The following background might be useful, since many of the CALMAC Website Committee members were not on the CALMAC Website Committee when the current website was developed. The current version of the CALMAC.org was developed in 2001. Equipoise Consulting, with Tim Caulfield as the project manager, was hired by the CALMAC Website Committee to develop the specifications for the site, consolidate the historical report data that was scattered amongst the utilities and the CEC, and create the conceptual structure for the site in conjunction with the Website Committee. An RFP was developed and the contract for the site construction was awarded to Conseio for about $35,000. The website was programmed in a language called Microsoft IIS/ASP, and was run on a shared server paid for by Conseio. Conseio went out of business without warning in 2007, causing CALMAC.org to be shut down without notice and the site information locked up by the server owner for nonpayment.

At that point Equipoise contacted former employees of Consieo who were able to supply backup copies of the site code and data, hired Third Strand as a technical consultant, contracted for a dedicated server at a server farm, and got the CALMAC.org back on line in approximately one month. At that time Equipoise reviewed the specifications for the site with the CALMAC Website Committee and it was decided that site security was paramount, but that the need to guarantee that the site would not be shut down was secondary (i.e., the site being off line for some period of time would not seriously harm anyone). As a result we purchased a hardware firewall as part of site security, but did not acquire mirrored hard drives, which would have guaranteed that the site was always up. In addition it is important to note that one of the main reasons for the dedicated server was the IMailServer application for the listservs.

Much of the cost of recent CALMAC.org upgrades has been due to the rather short sighted way that the original programming was done on the site. In addition, since Third Strand didn’t write the original code, they have to dig in and understand the original programming, and all the various ramifications of changes, prior to re-writing any code. Often, along the way, they have had to build in additional safeguards or rewrite code to ensure site stability. Since the major site upgrade about 3 years ago crashes of the website virtually never occur.

To complete the picture, the contract for site management moved from Equipoise to Caulfield Consulting when Equipoise was closed down in 2008. Tim Caulfield continues to manage the day-to-day operation of the site.

**Current Questions**

After the last Website Committee conference call on January 9, 2013, I sent an email to Jeff Yip of Third Strand asking the following question.

* Can we move the website to a hosted cloud computing contract for this purpose?
* If so, can we get a service agreement that guarantees speed?
* Will such an agreement reduce the hosting price?
* Are there other ways of reducing monthly hosting price?

During the week of March 4th I had a telephone discussion with Jeff that can best be summarized with the following bullet points:

* The current software and services on or associated with our server are listed on the attached page.
* The current website hosting contract costs of $258 per month, which breaks down approximately as follows:
	+ Server - $130 per month
	+ Hardware firewall - $90 per month
	+ Backup service - $20 per month
	+ Extra hard drive - $20 per month
* Methods of reducing cost for the current server setup:
	+ Remove Hardware Firewall and rely on Antivirus Software to protect the site. Consequence, increased risk of potential breach of site, level of increased risk unknown. Savings $90 per month.
* Cloud Computing for our software and site using a Virtual Private Server (a virtual server on a large shared server) would:
	+ Be about the same price, could possibly be $50 lower but probably not.
	+ There would still be the transition cost of moving to a new server.
	+ One advantage is that a cloud computer would never go down. They are run on a redundancy basis so they guarantee that the sites are always up. [Note: This feature was not a high priority when we transitioned to our own server in 2007.]
	+ They guarantee CPU performance and minimum RAM availability.
* Inexpensive Shared Hosting:
	+ Shared Hosting on a cloud computer is available for as little as $10/month, so these are the numbers that stick in most peoples’ minds. These hosting services operate using open source software such as Linux and similar open source software for other applications. That is how they keep the costs so low. They are typically used for simpler websites that are intended to create a company presence out onto the web at low cost.
	+ As stated above, the CALMAC.org site was developed in 2001 using Microsoft IIS/ASP as the programming language. ASP is a relatively antiquated programming language at this point. There are some shared providers that support ASP and SQL Server, but there would still need to be some configuration changes to move down to that level of service (from our current private server) and it would also be a performance downgrade.
* Search Speeds – Jeff pointed out that one of the key factors that slows down the search speeds on CALMAC.org is that the site was originally designed to present all results on a single page. A more efficient approach is to present the first 10 or 20 results on a page, then allow the selection of additional search results if desired. He says this would substantially increase search speeds. He estimates the cost of making the code changes would be less than $1,500.
* The website hardware is relatively antiquated (5 years old with 2 Gigahertz processor and 1 Gigabit of RAM) and possibly needs replacement. We recently migrated the database onto our own server because of changes at the server company, which increased the load on the server. We do back up the current site software to guard against loss of information should the server crash and need to be replaced.

**Recommendations**

Based on the information presented above we make the following recommendations:

1. Maintain the current server near term, but anticipate replacement or moving to a virtual private server within approximately one year. The major concern is that the server is old and since the server company has been sold several times since the server was purchased, the current server company sees it as a legacy issue and is not entirely dedicated to its support. This shows in our interactions with the company.
2. For the moment we recommend against the elimination of the hardware firewall in order to save $90 per month. All it would take is one instance of hacking to offset the money saved on the hardware with hourly charges by Third Strand to clean up the mess left behind.
3. Meanwhile, we should develop plans for moving the site to a virtual private server. This would involve contracting out the listserv service rather than continuing to maintain IMailServer ourselves. IMailServer is the main route for email hacking into the site. Since it was originally set up in 2001, the industry has moved to contract services for this type of effort. In planning this move we would also streamline our software needs by going to open source software for collecting website statistics and the virtual private server company would be supplying the antivirus capability. We could also contract for a virtual firewall if we desired. The entire move would make management of the site easier. There would be an estimated cost in the range of $7,500 to 10,000 for making this transition (see attached SOW and cost estimate).
4. If the Website Committee wishes to reduce costs, we should concentrate on efforts or software changes that would minimizing time put in monthly by Caulfield Consulting and Third Strand. Most of the hours currently spent are reacting to issues surrounding site operation. The average monthly cost of operation for CALMAC.org is ~$2,300 of which $258 is the cost of the server for site hosting. The majority of the remaining cost is for repairing issues with the site, issuing Study IDs, posting reports, managing the listservs, updating contact information, checking to be sure the site is up and functioning properly and interfacing with the committee. That effort represents, on average, about 12 to 14 person hours per month of Third Strand and Caulfield Consulting time. Of that average, a reasonable amount comes in slugs of time dealing with site improvements.
5. We recommend against rewriting the site software specifically to allow the use of low cost cloud hosting. The payback is way too long to justify it.

***List of server services:***

Base: Microsoft IIS/ASP

Installed:

* Microsoft SQL Server – This is the database software that facilitates the searches
* IPSwitch IMail server – This is the email and listserv software that allows for our announcement listserv and the other listserv services we supply to the Website Committee and DRMEC
* Urchin Web Stats – This compiles the website statistics
* Dundas ASP Upload component – This is the software that facilitates the upload of reports.
* Lanapsoft CAPTCHA component – This is the software that minimizes intrusion by web bots and spiders on our public access page. It makes you type in the weird letters that cannot be read by these automated processes.

ISP Provided:

* Symantec Endpoint protection – This is our antivirus software.
* Disksync Backup – This is the backup facility for the site that assures we would be able to get the site back up and in operation should the server crash.
* Checkpoint Hardware Firewall – This is the hardware firewall that isolates the server from the web, creating an actual firewall between the web and our server.

***Scope of Work and Time Estimate for Migration to Cloud Server***

Migration to third party mailing list:

* + research, configuration, setup of server/hosting provider
	+ setup of existing mailing lists/email boxes
	+ modification of site code to use off site provider
	+ user training

 Time Estimate: 15-20 hours

Migration to virtual private server (cloud based):

* + research, configuration, setup of server/hosting provider
	+ installation/setup of installed services: SQL Server, ASP upload, CAPTCHA
	+ configuration of other services: web stats, antivirus, backup, firewall(?)
	+ code/database migration
	+ site testing
	+ dns switchover

Time Estimate: 35-45 hours

Total Cost Range: $7,500 to 9,750