



# CONSULTANTS IN MINNESOTA

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## PRESIDENT'S MESSAGE

BY  
WADE HERSCHBERGER

Greetings,

It's that time of the year again – tax time. I (well, my accountant), just finished my tax returns and we had a short discussion on planning for the new year. The good thing was it made me think about expense budgets, expected income and all that good stuff. The bad thing is the year is already 2 months gone – I should be doing this in December :-(-.

My accountant wanted a projection of revenue for estimated tax calculations. I predict revenue in a couple of ways and reconcile the two. First I look at predicted revenue by customers. I also predict revenue by setting billable utilization goals, i.e. % of time billable to customers given a standard 2080 hours work-year.

I break revenue down by each current and potential customer. Where did my money come from and where will it come from?

### Next Meeting

Thu, Mar 18

Axel's in the Radisson hotel  
2540 North Cleveland Ave.

Roseville, MN

Mentoring 5:30PM Dinner 6:30PM

Members \$25 Non-Members \$28

RSVP 612.245.ICCA

Can I expect last years customers to generate similar revenue or will there be significant change? With the type of consulting I do – mostly longer term assignments, the specific customer may change year to year, but the expectation is that I will have 1-2 customers each year for 6-12 months each where I will spend

the majority of my time. I do have one customer that I can count on for incremental revenue throughout the year. I've had some 'one-time' small customers also, but those are harder for me to predict. Over time, it will be interesting to see if I can grow my small customer base to the point I don't need those large customer that varies from year to year. I'd like to see my business model evolve to several (5-6) customers that each need a few days a month. (I can dream, can't I ? :-)

Overhead would go up somewhat, but variability should go down, I think. My limited

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## NO MORE SNAIL-MAIL

BY  
ROBERT NEWMAN

You are holding a collectors item in your hand. Think of this issue of "Consultants in Minnesota" as a fossilized remnant of some bye gone age. This is the last printed issue of "Consultants in Minnesota." Starting with the April 2004 issue of our newsletter you will only receive the snail-mail version if you specifically request it.

For the last twelve months a printed newsletter has cost our chapter \$345.54 in postage

and \$481.38 in printing expenses. That is almost a thousand dollars per year. Be sure to suggest alternative uses for this money!

I will be changing the layout of the newsletter so it is better suited to electronic viewing. If you have any suggestions, I would be happy to have them. I may even use them. :)

If you simply MUST have a snail-mailed copy, please contact Larry Bremer.

## PRESIDENT'S MESSAGE CONT.

experience (and intuition) indicates that rates can go up a bit also.

I have a pretty ambitious goal for billable utilization over a year, which I missed by a few percent last year. This year is starting out well above last year as well as above target. Hopefully that's a good sign for the rest of the year! I could survive on 60% billable utilization but then I might as well take a 'real' job and eliminate some risk and headaches. My expectation is at least 75% billable utilization, with a target goal of over 95%.

Non-billable time includes professional development, administrative/business overhead, networking, etc. I'm not even sure I have identified all the right categories. I don't track non-billable time regularly to the level that I know some of you do. How many of you track non-billable time rigorously? I would \*very\* roughly estimate non-billable

time at around 25%-33%. Anybody have any real data on their consulting business?

Basic math says that if I hit my target goal of 95%+ billable utilization, I'm going into a year expecting to work at least 20% overtime. Hmm... We'll see if I think that's sustainable over the long haul – ask me in a few years if I'm still alive to talk about it.

I'd be very interested in some statistics of billable/non-billable utilization from ICCA members. Maybe we could collect some data anonymously to help analyze that, if anyone else is interested?

A final note: It's not too early to start thinking about the national convention in June in Toronto – it'll be here before you know it. I really thought it provided a lot of value to me last year. I'm definitely going again.

Wade

### March Events

#### Week of 3/8

HotSkills Inc.,  
Northland Inn,  
Brooklyn Park ISO  
17799 Implementa-  
tion Course. Pre-  
senter Bob Aan-  
erud. Cost \$2000  
per person plus  
food & incidentals

**Tues 3/9 6:00-  
8:30PM**

Minn.Entrepreneur  
es, Inc. The Venue,  
Galtier Plaza, St.  
Paul. Topic: Finan-  
cing Your Grow-  
ing Business. Cost  
\$25 at door, \$20  
with Res. Free to  
MEI members.

#### Week of 3/15

HotSkills Inc.,  
Northland Inn,  
Brooklyn  
Park.BS7799 Infor-  
mation Security  
Mgmt Sys-  
tem(ISMS) Auditor  
Course. Presenter  
Bob Aanerud. Cost  
\$2000 per person  
plus food & inci-  
dentals

## VOICE OVER IP: AN OVERVIEW

BY GERRY ISAACSON TGICO CONSULTING, INC

Are you considering creating your own Voice over Internet Protocol (VoIP) telephone system, or implementing one for a customer?

VoIP is a rapidly growing technology that uses the Internet to route voice calls. It provides an inexpensive replacement for the traditional methods that utilize the Public Switched Telephone Network (PSTN). Internet-based telephone systems are able to compete on a cost basis because they don't need to provide the cable infrastructure and the costly switching stations. Some very large corporations are replacing their internal PSTN telephone systems with VoIP as well.

Routing phone calls over the Internet has a lot in common with web pages, e-mail and instant messaging. Sound is entered via a microphone, converted to a digital format and placed in packets. The packets are transmitted, received, re-assembled, and converted from the digital format to sound. Finally the sound is played via a sound card and speaker. Sound is transmitted using either the MGCP (Media Gateway Control Protocol), h.323 protocol or SIP (Session Initiation Protocol) and moves across the Internet in either TCP or UDP packets.

You can find sound transmission standards

in the list of requests for comments (RFCs) at the Internet Engineering Task Force web site, [www.ietf.org](http://www.ietf.org). RFC 3261 describes the components that are required to develop a SIP-based network.

I used the book Practical VoIP using Vocal by Luan Dang, Cullen Jennings, and David Kelly (O'Reilly & Associates, Inc., June 2002) to teach myself VoIP and write portions of this article. Its major problem is that most of the detailed instructions and system references are already obsolete. The book continues to be an excellent guide to the concepts behind and implementation of VoIP. The open source software that the book recommends and I have implemented is VOCAL, created by a company called Vovida Networks ([www.vovida.org](http://www.vovida.org)). Currently the authors of VOCAL are paid employees of Cisco Systems, Inc., which support VOCAL as part of a corporate strategy to accelerate the adoption of VoIP.

The most basic implementation is to create a connection between two UACs (user agent clients). The criterion is two clients that are directly connected to the Internet and have IP addresses (e.g., 65.29.57.49) or are on the same LAN sub-net. The software for UACs is in-

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cluded with the VOCAL application from Vovida, but is written for a Linux / Unix operating system. Since I am a Windows based UAC and Vovida doesn't provide a Windows UAC, I use either OpenPhone, a freeware product downloaded from the OpenPhone project ([www.openphone.org](http://www.openphone.org)), or NetMeeting, which is contained in Windows XP.

To make a call (within the above criteria),

1. Both parties run either OpenPhone or NetMeeting.
2. One person enters the IP address of the other (e.g., 65.29.57.49) and makes the call.
3. The other party answers and they start talking.

This implementation is simple but limited. Someone directly connected to the Internet can't make a call to someone on a LAN subnet.

To make a call between the Internet and a subnet, you'll need to install and activate the VOCAL UAS (user agent server). This software provides functionality for sound processing that is consistent with Linux and Windows client and server software to process e-mail and instant messaging. Maybe in the future sound processing will also be delivered as part of Linux and Windows.

VOCAL software installation was a much larger task than I expected. It is not so hard actually loading the software. The problem is finding a good match between the VOCAL software and the operating system. On a Unix / Linux platform almost any application software can be easily installed. VOCAL uses functions from many different languages. The book installation used Red Hat Linux version 6.2. I didn't want to use that old a Linux version; moreover, Red Hat is moving to enterprise software, which I don't want to use. All of my servers run FreeBSD. I spent many weeks trying to modify VOCAL to run on FreeBSD. I finally gave up. I came across an open source Red Hat Linux called Fedora ([fedora.redhat.com](http://fedora.redhat.com)). It had so many problems that I didn't get around to installing VOCAL. I tried Debian Linux ([www.debian.org](http://www.debian.org)). This product installed and ran well but didn't match up with the VOCAL installation. I finally tried Mandrake Linux version 9.2 ([www.mandrakelinux.com/en-us](http://www.mandrakelinux.com/en-us)), which, with the addition of some missing Perl modules, appears to be working very well.

The VOCAL UAS consists of many servers

that may be installed on one or many different computers. The first server is the Location server. This server is where the UACs store contact information (e.g., Gerry Isaacson is at 65.29.57.49 and is available to take calls). The second server is the Redirect server. This server, using the information collected by the Location server, keeps track of the users who are registered and provides routing information to help incoming and outgoing calls arrive at their intended destinations. The third server is the Proxy / Feature server. This server provides enhanced telephony features such as call forwarding and call blocking. Finally, there is the Call Detail Record server. This server is used to capture user information for billing or accounting applications.

When all of the VOCAL UASs are installed, the caller no longer has to enter the Internet address. The UAS provides a gateway to select the call recipient and handles any necessary redirecting. This is a one-time freeware installation on an existing server with no monthly or minute fees. The access area is limited to a subset of the PSTN. The limitation of the totally free environment is that everyone must be talking via their computers.

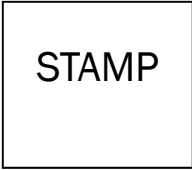
Cisco and other companies sell hardware that provide gateways to the local PSTN. There is a cost associated with the gateway and local PSTN access. These companies also sell hardware that allow you to talk over the Internet using something that looks like a conventional phone. Of course there is a cost for this equipment. VoIP can be run over Wi-Fi connections.

One thing to note is that VOCAL (the UAS) and OpenPhone or NetMeeting (the UAC) use different packaging protocols. VOCAL uses SIP and OpenPhone / NetMeeting uses h.323. There is a translation module called siph323csgw that provides translation between the two protocols. This translator no longer works with the latest version (Version 1.5) of VOCAL. Cisco, the provider of VOCAL, doesn't worry about this translator because they are in the business of selling hardware and don't want to enhance the non-special-hardware environment. There are many people looking for someone to update this module but to date no one has volunteered (in open source code all work is done as a volunteer). If you are interested in modifying this translator code, please contact me.

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## CALL FOR ARTICLES

BY JACK ROSE

Got a story to tell? We'd like to hear it.

Can you write a few paragraphs on an interesting topic related to what you do for a living? ICCA of Minnesota is looking for articles for this newsletter, for our web page, and for submission to larger-circulation journals. It's an effective and inexpensive way to get your firm -- and ICCA -- into the limelight.

Here are some of the discussion topics that have been suggested in the past several months. You can write on any of these, or suggest another.

How you rescued a client's data, saved him money, or kept him out of the doghouse.

- "I don't usually criticize other consultants, BUT ..."
- The client from hell!
- I have a small business. I don't need consultants and I couldn't afford one.

- Why is software so expensive?
- I haven't updated anything in my system in the past 18 months. I don't read the trade papers as I imagine you do. What's out there that I ought to know about?
- I use my computer every day. What should I do RIGHT NOW to make my computer less vulnerable?
- It's difficult finding good consultants. What are the key questions I should ask to find out if the candidate is a good guy? How do you screen who to use and who to lose?
- How can I tell if my computer has a virus?
- When is it OK to copy software?
- If you're unsure about your journalistic skills, we'll be happy to rewrite your stuff for you. You have final say over what gets submitted for publication.

Please help! Send your articles or story ideas to [editors@icca-mn.org](mailto:editors@icca-mn.org), or call our chapter's new number, 612-245-ICCA.



*When You Hire One of Us, You  
Get Our Collective Knowledge and  
Experience*