

# Taking tears out of telco

Going gold at the telco Olympics is not hard, writes **Charles Wright**

**W**E ELITE athletes in the Savings Olympics know that gold medals are not won purely by individual ability. Success requires the sustained efforts of a team of dedicated experts and supporters.

That's particularly true for the David and Goliath event of our Olympiad, which pits competitors against the might of telco giants such as Telstra. We've won silver and bronze medals in this event with the deployment of a Linksys SPA3102 analog phone adaptor, which we wrote about last year, and with a basic installation of an Asterisk open source PBX solution at the Bleeding Edge cave a few months ago.

But to have a chance at gold, we knew we'd have to install an Asterisk system in the spouse's business, which handles many more calls on several extensions and requires sophisticated facilities such as interactive voice response.

In the establishment phase of the business, we'd used a hosted PBX plan offered by Melbourne-based Mytel, which is essentially an Asterisk service hosted in a data centre. For a \$49 set-up fee, and \$12.95 a month per extension, it allowed us to make cheaper VoIP calls over the internet, with voice, mail, IVR and other facilities that are normally available only to larger companies with much bigger budgets.

Our arrangements allowed us to trim our office and home phone bills from \$359 per month in mid-2007 to less than a third of that, despite a dramatic increase in the number of calls. But while mobile calls over

Mytel are considerably cheaper than Telstra's rates, they were becoming an ever-larger component of the bill.

As the business grew, we would also have to introduce some more handsets. At \$12.95 a month apiece, we knew it was time to have our own Asterisk box on-site, despite the hardware costs and the prospect of having to provide our own tech support if something went wrong. Even with our reduced call costs, the savings would pay for the equipment in less than a year, and it would be easier to add features such as call filtering and call monitoring.

For that we'd have to have an expert team that could navigate a system that is beyond the capabilities of even experienced computer users. We could have paid a couple of thousand dollars to a professional team to do the job, but fortunately

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the world of Asterisk seems to attract enthusiasts who are prepared to offer the benefit of their experience, either for free or for very competitive rates.

Our first indication of that was Ben Sharif, a retired systems analyst who lives in Penrith, NSW, from where he has maintained an active presence on the Whirlpool VoIP forum at [tinyurl.com/bvsve](http://tinyurl.com/bvsve) and more recently in [elastixconnection.com](http://elastixconnection.com).

A phone call to his home gives you an indication of the power of Asterisk. The call is picked up by Asterisk's inbuilt IVR system.

His wife Rohan's recorded voice first informs the caller that they do

not accept calls from direct marketers or political parties, then allocates numbers 1 to 5 to each member of the family. We pressed 1 for Ben.

If we'd called from a number without caller identification, we'd have been met with another menu that requires identification and a brief description of the purpose of the call. That gives the Sharifs the option of rejecting the call, without the knowledge of the caller. The IVR acts as an automated white-lie generator, simply informing the caller that "The party is not available". Somehow, we feel those automatic countermeasures should be available in every home in an era where companies are using advanced technology to pester prospective customers.

Ben has entered the numbers of direct diallers into the Asterisk filters, so the system automatically blocks a good proportion of unwelcome callers.

He's written a series of free guides to Asterisk-based systems: Trixbox Without Tears, Elastix without Tears and PiAF (PBX In A Flash) Without Tears, which prospective Asterisk users can download as PDF files from [dumbme.mbit.com.au](http://dumbme.mbit.com.au). The detailed explanation contained in TrixBox 2 Without Tears allowed us to get an understanding of the Asterisk distribution we eventually decided on, and would have allowed us — albeit with a good deal of tinkering — to put together our own box.

Fortunately, however, we had an even better source of assistance: Nathan Pinski, director of a company called Medi 7 ([voip@medi7.com.au](mailto:voip@medi7.com.au)), which has five medical clinics in inner and south-east Melbourne. The Asterisk servers rolled out by Nathan and his 19-year-old son Samuel — an aerospace engineering student who has become an Asterisk expert — have trimmed the phone bill from \$5000 under Telstra in 2005 to about \$2000, which includes the cost of about 10 broadband services.

They guided us through the process of selecting all the components for the PC that would run our Asterisk solution; pointed us towards a couple of investments to avoid potential problems; helped us choose handsets and VoIP providers and eventually packaged up the Trix-Box application.

