# **EXHIBIT 1**

## http://www.defcon.org/html/defcon-14/dc-14-speakers.html

## Owning the linksys wrtp54g VOIP Router

Arias Hung

#### Abstract:

The wrtp54g/rtp300 is a linksys VOIP Proxy router with one primary distinguishing characteristic that separates it from all other VOIP Routers on the market today: It's based on linux.

This fact alone makes this router the key to learning the inner workings of VOIP and opens up a world of possibilities when it comes to its de-obfuscation. After all, 3rd party firmware on its parent router, of which it is a descendant of the wrt54g, is big business as they've become near ubiquitous in every consumer household. With VOIP poised as the current cat-out-the-box technology prepped to take down established telecoms, VOIP security takes front and center as a paramount imperative.

The problem to this point has been this router being tied specifically to one vendor, who happens to also be the largest VOIP only vendor to date whose interest is that your hardware can be only used for their service.

Discover how vendor provisioning works on these routers, in order to reclaim control of your hardware. Learn specifics as to the ar7 dual processor architecture that the hardware utilizes, and how to unlock its numerous built-in capabilities that have been crippled prior to release by the vendor. Watch a demonstration of how easy VOIP and its companion protocol MGCP can be manipulated for illegal purposes such as call spoofing, number hijacking, and untraceable call routing. And find out how companies that provide VOIP are complying with the FCC mandate that requires them the ability to snoop at will without a court mandate, by saving all of your voice calls as a .way file that can be listened to at their leisure.

### Bio:

**Arias Hung** is a security professional with a particular passion for embedded distributions. Arias began his career in unix administration, specializing in SGI/Irix while employed at the Lawrence Berkeley National Laboratory (lbl.gov) before expanding independently as a Unix consultant in silicon valley and gaining a degree in computer forensics and security. Arias is currently working as a security consultant in the Seattle area.