

# Case Study: Radio Paradise

## The Company Background

Radio Paradise is an Internet based radio station devoted to offering alternative music. Based in Paradise California, this little “radio station” is a throwback to those early experimental days of FM of the 1970’s. In those days a DJ was a disk jockey, not just an employee of a large corporation.

“It seems that everyday it gets harder making an honest dollar without giving up a little piece of your soul to the corporate reaper.” So William (Bill) Goldsmith felt when he started Radio Paradise. Yet as time went on it became apparent that he wasn’t the only one who felt this way as more and more people tuned in. Internet radio had come into its own thus allowing new avenues of creative expression that traditional radio couldn’t achieve.

## The Challenge

Success often brings its own baggage, however. What with an ever increasing selection of music being provided and more demands being made both on bandwidth and hardware, it looked for awhile that Bill might fall back into the clutches of the status quo and be forced to shell out some serious money for the right software to manage his music library stats and listener feedback.

## The Situation

Web radio’s early days started out as the exclusive domain of the technically adept. Their favorite music was broadcast for all to hear. At first, nobody bothered with such mundane activities as maintaining music lists and paying attention to the web audience. But it didn’t take too long before the broadcaster was getting requests and people were discussing their likes and dislikes - Internet music was getting organized.

The business model that Radio Paradise follows is in many respects a hybrid of the traditional radio station married to the PBS approach of audience interaction. Music is carefully selected, and the artist gets paid for their work as it airs over the web. In addition to tracking airplay is the need to track listeners’ reaction. People aren’t afraid of expressing what are sometimes strong opinions and the forum serves double duty by providing both the means for some friendly chat as well as supplying critical listener feedback back to the station.

The challenge is to gather and organize all these pieces of data, airplay, opinions, and music lists in a highly interactive environment. The result is reflected both in the website and the music.

## The Recipe for Success

Fortunately, Bill already knew what he wanted. His previous experience with PostgreSQL, on another website project, had given him the confidence that he had the right solution in mind.

His main web server is a dual AthlonXP 2.4 GHz with 200 GB of RAID 10 storage & 2 GB of RAM. The music server is a Dell dual-Xeon 1.8 GHz. The rest of the infrastructure consists of a number of single CPU machines used as servers and workstations. And all of it controlled by one laptop machine that can be located at any given time, anywhere in the world.

Depending on how you look at it; it took seven days to get the setup running (the webserver), five minutes for the music server, and seven years to make Radio Paradise what it is today.

Asked who set up the machines Bill wryly answers "I did." As for whether or not there is administrative overhead Bill says "no, not especially ... In most cases, I just use the default RedHat RPM configuration".

Bill did admit to getting a little bit of help tuning the database server courtesy of Joshua Drake of Command Prompt Inc which is one of a growing number of enterprises specializing in PostgreSQL solutions.

## Success

Radio Paradise is already spread across half a dozen servers with over 2,000,000 file requests per day "and it looks like we could hit it with several times that before we ran into any issues" says Bill.

Bill confessed that even after he had chosen PostgreSQL he had seriously considered the need to switching over to Oracle as the load increased. However, he said "Now that I've seen how scalable PostgreSQL is, I doubt if we'll ever need anything else".