

# More Stable WiFi & Other Tips

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This week I made a quick trip to South Bend, Indiana to attend Granger Community Church's IT Forum. That event and others like it are great places for good fellowship and for sharing ideas and solutions common to most in church and ministry IT. Following are a few things I picked up that may be helpful!

## WiFi Stability

A common complaint about WiFi (wireless data communications) is that routers lose their signal, often at the worst possible times. A solution was shared that, when you see the reason for it, makes great sense.

WiFi routers operate at a radio frequency agreed to and published in standards by the Institute of Electrical and Electronics Engineers, or IEEE for short. IEEE Standard 802.11 is a set of standards for computer communications in the 5ghz and 2.4ghz public radio spectrum ranges. When you buy a WiFi router, it'll say it communicates with 802.11a, 802.11b, 802.11g, or 802.11n devices, or a combination of them.

The problem is that many devices use some of the same frequencies as some of those specified in those four standards. Specifically, the problem is with 802.11b, g, and n. They communicate at 2.4ghz... but so do microwaves, wireless telephones, Bluetooth-transmitting phones (think *wireless headset*), and many other devices.

The solution? Set your WiFi routers to only communicate over 802.11a, and your WiFi interference will disappear!

Here's a real world example:

- You have wireless Sunday School checkin stations for use with your church management system, and they keep failing during critical heavy-use times.
- The problem is most likely caused by all the cell phones near them that are Bluetooth enabled! At the IT Forum it was shared that as few as five or six phones can knock out a WiFi connection!
- Change your WiFi routers to communicate only on 802.11a, and the problem goes away!

One caveat, however, is that 802.11a wave strength degrades easier, so you may have to install additional routers if you're trying to go through a lot of walls, etc.

## Microsoft Windows Vista

While the concerns of many continue over using Vista, it was reported by some in the forum yesterday:

- Running Vista (Business and Ultimate editions only!) in 32-bit mode works well if the computers were shipped with it installed on them. There may be some configuration needed if these will be on a network and you do redirection of the My Documents folder.
- Avoid Vista 64-bit.

## SPAM Filtering

There are many good SPAM filtering solutions. Our favorite is from Barracuda Networks. Our firm (MBS) hosts this service for many churches and ministries, and the results are astounding: 95.2% of all email is SPAM! If you're not filtering your email, this is a solution worth implementing!

## Web Content Filtering

There are many web filtering solutions, but our discussion at the IT Forum focused on the enormous need to do something to help those on our teams. A colleague gave statistics demonstrating that many men *and women* in ministry have a difficult time overcoming this problem. Though filtering is essential, I believe it doesn't go far enough. We need to also employ a tool that will help people want to avoid inappropriate content.

I'm a big fan of Covenant Eyes ([www.covenanteyes.com](http://www.covenanteyes.com)). Their solution is the best I've seen:

- Doesn't slow internet browsing;
- All sites visited are scored and summarized in an easy-to-read report with drill-down capability;
- Reports are sent to accountability partners (we recommend their supervisor and their spouse—or pastor if unmarried); and
- CE has inexpensive volume pricing for church and ministry staffs.

## IT Roundtables

Roundtable meetings are a great way to meet others with similar jobs, which makes for great fellowship and support, and to learn how others have solved some of the issues you're wrestling with. There are some I try to attend every year that focus on Information Technology:

- *Spring & Fall Church IT Roundtables*. These are coordinated by a grassroots movement of church IT folks. ([www.citrt.org](http://www.citrt.org))
- *Granger Community Church's IT Forum*. This event is held every Fall. ([www.wiredchurches.com](http://www.wiredchurches.com))
- *Christian Leadership Alliance's Ministry IT Summit*. This event is held every Spring as part of the larger CLA Conference, and is coordinated by Steve Hewitt and me. ([www.christianleadershipalliance.com](http://www.christianleadershipalliance.com))

I highly recommend that whoever is responsible for IT on your church or ministry staff attend at least one of these events. They are each well worth the time and the expense—even if it involves travel.

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