

## Orlando Sentinel

# Downtown Orlando teems with signals

By Chris Cobbs  
Sentinel Staff Writer

David Barker is driving south on Orange Avenue, his attention focused on a laptop computer perched in the passenger seat.

The midday street traffic is slow, but the airwaves are abuzz with high-speed Internet signals -- and Barker wants a free ride.

Probing for unsecure wireless networks, Barker is giving a demonstration of a practice called wardriving, which enables mobile passers-by to piggyback on unprotected networks inside offices and even homes.

"There's a ton of activity. This area has a very high density of wireless," he says during a two-hour excursion in a car and on foot around downtown. "And three-fourths of the networks don't have adequate security."

Barker, 28, is a senior security engineer with Compuquip, a Miami-based firm that advises Fortune 500 companies on computer security. It's part of his job to visit buildings and probe for network weaknesses that would be vulnerable to hackers.

Most companies have fortified their wired networks with firewalls and other measures, but their newer wireless networks are less well-protected, he says.

In this high-tech version of joy riding, intruders can gain access to the Web, pirate e-mail or even hack into company secrets stored on networks.

To get an estimate of wireless activity in downtown Orlando, Barker is equipped with a laptop with a wireless network card connected to an external antenna about the size of a magic wand.

While in the car, his gear is hooked up to a GPS device that talks to satellites and shows the geographical coordinates of a wireless network signal on the laptop screen. On foot, he carries the laptop, but not the antenna, lightening his load and also decreasing his ability to obtain a strong signal.

The screen readout on his laptop is dull, consisting of rows and columns of numbers requiring a practiced eye to translate.

In most cases, Barker is able to tell if signals are coming from a given office building, but he can't always determine which floor in a high-rise is home to a network.

His findings:

- 64 wireless networks along Orange Avenue between Concord and Anderson streets.

- 24 wireless networks along Concord between Orange and Summerlin Avenue.
- Less than 25 percent of the networks appear to be protected against invaders. However, many of the downtown networks are located on the upper floors of high-rises, and weak signals lessen their vulnerability.

While weaving back and forth along narrow, one-way streets downtown, Barker finds networks with names like Ninja, Linksys and My Wireless Net. There's even one with a name that can't be printed in a family newspaper.

Outside the Citrus Club, Barker locates an unsecure network but can't tell if it's coming from a nearby building. The signal isn't strong enough for him to get on the Web.

Strolling through the lobby of a large bank, Barker detects signals emanating from upper floors, but he can't get on the Web.

"If someone was parked nearby and had a good antenna, they could easily break into one of these networks," he says.

After completing his survey of downtown, Barker drives east along Concord, a shady lane lined with graceful older homes.

Who would guess what lurks within?

"Wow!" Barker exclaims, his screen lighting up with a half-dozen wireless networks.

"This is the most densely wireless residential area I've come across. Haven't seen anything like this in Miami."

He parks in front of a house.

"It's looking good, a really strong signal," he says excitedly.

Setting his laptop to piggyback on a wireless signal, Barker opens a Web page. On another screen, he can see if the wireless user inside the house is doing e-mail. He can also see what Web sites the residence is visiting.

"There is software out there that would allow a warchalker to easily open the e-mail," he says, "but that's against the law."

Barker's advice to businesses and residents with wireless networks is the same: Protect yourself by enabling the security measures that come with network gear. If in doubt, consult an expert to secure the network.

*Chris Cobbs can be reached at [ccobbs@orlandosentinel.com](mailto:ccobbs@orlandosentinel.com) or 407-420-5447.*

*Copyright © 2003, Orlando Sentinel*