

New geotracking technology could make you easier to find

11 April 2011, by Deborah Braconnier

(PhysOrg.com) -- Currently, advertisers are only able to access and track your current location online to a radius of 35 kilometers without your permission. However, as presented at the Usenix Symposium on Networked Systems Design and Implementation in Boston last week, Yong Wang, a computer scientist at the University of Electronic Science and Technology of China, has developed a three-stage system that would allow advertisers and others the ability to track your location to within a few hundred meters.

The system in place now enables someone to ping a data pack to your [IP address](#) and convert the time it takes to return into distance and this can narrow it down to around 200 kilometers. Wang's new system utilizes this method as a first stage.

For the next stage, Wang and his team realized that many universities and major corporations have their own in house [servers](#) and their IP addresses can be directly tied to a physical location. They created a catalog of some 76,000 of these landmarks on Google Maps. Once the first stage has been completed and they have narrowed down a radius of around 200 kilometers, they then locate the landmarks within that radius area and ping them. Recording the time it takes to bounce back from these landmarks can allow a comparison to the first stage and further narrow down the location.

Once it has been narrowed down, they repeat that step to further narrow down the location. In large cities with many landmarks, the tracking can be extremely accurate.

All of this information can be gathered without an individual's permission. The only way to avoid being tracked is to go through a proxy server. The system is unable to go around this, however, it is able to detect a proxy server and will flag the test as unable to locate.

More information: via [Newsscientist](#) and [PCauthority](#)

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