

An Operational View of Trust Needs of Moving Objects

Randy Bush <randy@psg.com>
Internet Initiative Japan, Research Lab

While I am very interested in the secure protocol aspects, after all I work on secure routing, I want to focus on the operational view of needs.

A few weeks ago, I spent an hour trying to find what device on my natted (blush) home/office wireless had the IP address 192.168.0.34. There were 15 devices, or so I thought. It took over an hour, but finally found a 16th device I had not noticed, an AppleTV, and it had that address. I needed 'ping and beep.'

Now think out a few years when we have 'homenets' that are much bigger than that, wearable devices, ...

When a new device comes in, I want to authenticate and register it. When I have a guest, I need to grant some, and only some, of their devices temporary access. When something is wrong, a normal human being needs to be able to at least triage if not debug, and ping and arp are just not what the user wants.

FWIW, I think the problem will be even more serious in the enterprise. What happens now when I walk into the office with an iPhone? I can not use it unless i already have some other Intranet access to get the loooong WAP2 key and then type it in. When I work for a large enterprise and am wearing eight devices some of which need to talk to office services, current methods are just not going to work.

It is a large AAA problem, combined with a trust and identity problem, combined with discovery, debug, management, ... The list is large. And the tools just are not there. But they will have to be.