Session 8: Internet of Things

Home Network Registry Idea

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Today’s Home Network & IoT implementation are disparate, kind of scary & need structure!
The home network of the future should be safe & secure and **simple** to use!
The home network should be reachable from the internet seamlessly and securely.
Maybe even your car should be connected to your home network.
And the home network grows to include personal and **wearable** IoT, inside and outside the home...
Your home network internal & external traffic should be secure using a common key.
Seriously, what is this bringing to the domain industry?

A domain name per household!
Leveraging the chain of trust in DNSSEC and some Innovation to create a secure home network platform
Your local ccTLD will provision your domain, sign it with DNSSEC and establish a secure chain of trust to your local home router, and **magically** solve all your worries and keeping your online family safe ☺️
171 emails in my mailbox so far …

<<The naming mechanism needs to function without configuration from the user. While it may be possible for a name to be delegated by an ISP, homenets must also function in the absence of such a delegation.>>

• Sooo, let’s make delegated “home” domains function without user configuration!
The focus is on Automation

Registry Automation

Home Network Automation

+ glue and some challenges

CIRA Labs - Home Network Registry
Remember, it’s an idea. So far it looks like this...

That’s Supposed to be a napkin 😊
1. Buy a home router & home domain
2. Provision domain on home router
What do you think?
Going forward, it’s a journey!

• Motivation
  – Ensure long term ccTLD relevance in the future of IoT

• Proposing ccTLD to develop a solution
  – To keep the home network safe and secure
  – To create a secure `<internet home>` IoT environment
  – To leverage DNSSEC as an innovation platform to create a sort of hub for “home trust”
  – To make the home network remotely accessible
  – That leverages the ccTLD registry expertise
The new <Internet Home>