What role do broadband providers have in securing the residential IoT ecosystem?

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Residential source identification problem: identify device(s) that are source of malicious traffic
EDICT architecture enables identification of compromised device(s) behind NATs while preserving user privacy given only source port and timestamp.
Criticisms we have received have been economic and incentive based, not technical.

- “ISPs have no incentive to help users with IoT security challenges”
- “It would increase ISP costs to notify customers”
- “ISPs underinvest in security of their customers”
Previous academic work reaches differing conclusions

For research, technical, and public policy reasons we need clearer understanding of ISP-customer security economics

- Danger that community will reject a class of technical solutions that are viable
- Suggests need for regulatory intervention when one might not be necessary
Junk: other note material

• Simple model where notification leads to increased cost from a customer service call
• Contagion model
• Private goods --- Common goods --- Public goods