



Who owns the home network?

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Overview



- **A tale of two antennas**
- **Definitions and Background**
- **EchoStar Capabilities**
- **Case study**

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Two antennas



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Definitions and Background



What is a “Network” good for?

- Network provides virtual or physically divided, discrete functions.
- Home networks do this where customers live.

Paradox

- The best home network is an invisible one.
- There is a term for those who sell invisible goods...

Danger! Danger!

- At the boundaries of the home network, some anti-social people would like to be able to reach in from outside and manipulate your information and devices.
- We call them hackers.

EchoStar Capabilities



What we provide today:

- Multiple, switched LNBF
 - + off-air
- UHF remotes
- Multi-television set top box
- Ethernet in our new, MPEG-4 STBs
- Homeplug 1.0
- Pocket Dish

Case Study



Q: Who owns the home network?

A: Santa Claus

Case Study (cont.)



Santa Claus as a disruptive agent of change

- Once a year, Santa brings new devices that need to integrate with older devices.
- Next year's network-attached television set needs to work with last year's network-enabled printer.

Santa Claus as a home network customer

- Santa's network requirements vary with the time of year
- email communications are vital before December 25th.
- Video delivery is vital during the College Bowl season.

Santa Claus as an arbiter of performance

- You don't want to be on his naughty list.



Thank you.

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