

The background features a collage of satellite dishes and circular graphic elements. On the left, a red square contains a white circle with a dashed line. Overlaid on the entire image are various circular patterns, some with tick marks and numbers (150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) and arrows, suggesting a technical or scientific theme.

**((X2nSat))<sup>TM</sup>**  
extending your reach

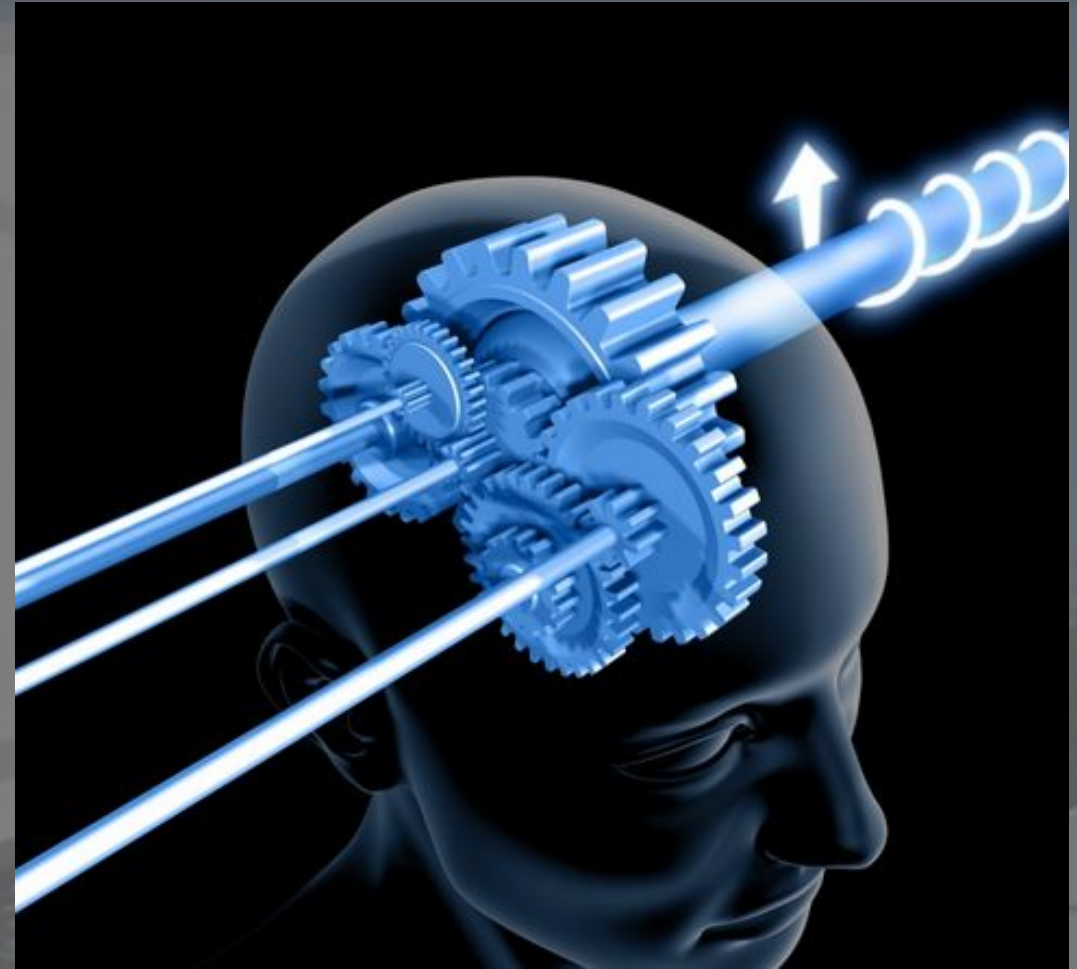
# BREAKING THE MYTHS

## Satellite: Breaking the Myths - VoIP



# YES VoIP WORKS

What is the #1 reason people tell you VoIP will not work over wireless WAN technologies?





# LATENCY

Latency - a stage of psychosexual development following the phallic stage that extends from about the age of five or six to the beginning of puberty and during which sexual urges often appear to lie dormant... OK, let's talk telco, we sure do create our own definitions from words with entirely different meanings...



# LATENCY

Latency—the time it takes for a signal to travel from one point to another in telecom networks...But what is it about latency that is most important?

# JITTER

**Jitter** - is the deviation from true periodicity of a presumed periodic signal in electronics and telecommunications, often in relation to a reference clock source. Jitter may be observed in characteristics such as the frequency of successive pulses, the signal amplitude, or phase of periodic signals. Jitter is a significant, and usually undesired, factor in the design of almost all communications links. What did you just SAY???

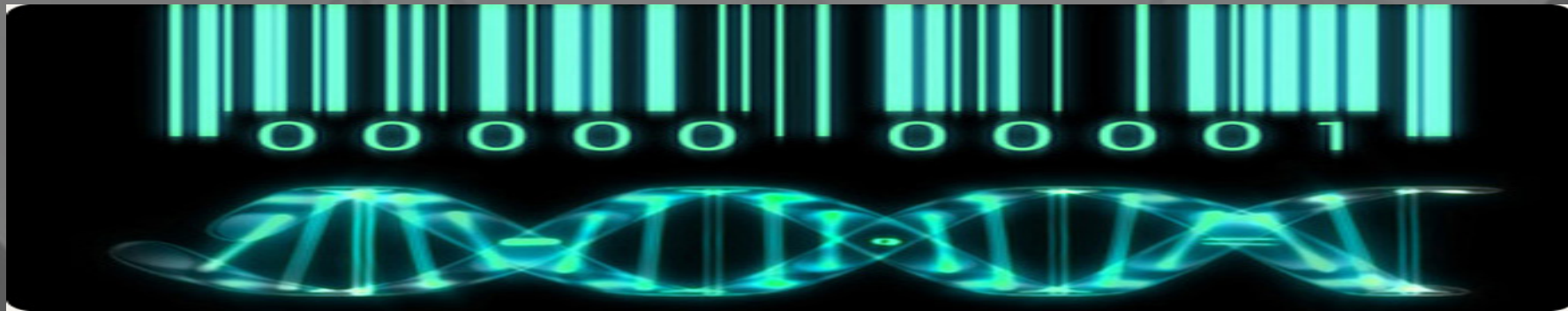
# LET'S BREAK THE MYTH

Latency is not the issue for VoIP, Jitter is the issue. The reason VoIP struggles on many wireless technologies is the design of the network, whether it be for residential use, or is just tough to control, the design of the network matters. Our solution is built to consumer specifications with Jitter Buffer of <20ms and that is important, but why???



# THE DNA OF VoIP

VoIP is a technology that uses packets delivered over several different codec's. Those packets are sensitive to how they are delivered. When delivered out of order, due to the nature of the technology, we can hear that and we call it GARBLED AUDIO...





# THE DNA OF VoIP

The Primary cause of garbled audio is jitter. Jitter causes the packets to be delivered out of order with enough spacing in time that we can actually hear the system trying to put the packets back in order, and with a real time audio system we are hearing man made noise. Where are many providers currently fixing the issue??

# THE X2nSAT NETWORK

Our network is designed to meet the highest standards for use in heavily regulated environments. We support M2M solutions which require packet loss of less than .005 – given in an SLA. Since Jitter is the big cause of Packet loss it means we are designed from day 1 to support VoIP. This has led us to having the largest healthcare Corporation on the planet as a customer, and we are their BC solution for their VoIP network.

# THE X2nSAT NETWORK

We offer more technical trainings....  
Interested?



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