ICN in a Commercial Context: A Video Distribution and Monetization Solution for Next Generation Streaming

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Background: 8x Labs

Small innovation group involved in television and streaming technology for 20+ years. Working with content creators, TV networks, operators and distributors. Providing software to support their video services and end user experiences on any device.
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The traditional TV channels and PayTV distributors represent the spinal cord of a 200B$+ business in North America alone.

But the traditional business models are eroding. And people are watching more videos than ever.

Large Internet companies (GAFA) are reshaping the ecosystem and redefining the business models and distribution channels.
Today’s IP Broadband Growth Reality

By 2020

IP Broadband Growth Drivers

- More Internet Users: 3.0 Billion in 2015, 4.1 Billion in 2020
- Faster Broadband Speeds: 24.7 Mbps in 2015, 47.7 Mbps in 2020
- More Video Viewing: 70% of Traffic in 2015, 82% of Traffic in 2020

Source: Cisco VNI Global IP Traffic Forecast, 2015–2020
Why ICN?

Too much traffic on the IP network infrastructure to support the increase in video traffic without significant changes to the notion of distribution itself.

We can’t maintain the existing IP network architecture status quo.

This is why we believe in the opportunity for ICN distribution augmented with new trust and security models.
Our Solution: ICN and Blockchains

ICN
- Video distribution scale with live-sessions rather than with the number of users
- Low Latency Video Distribution via In-router Caching

Blockchain:
- Trustless consensus
- Smart contracts, a protocol to automatically verify and enforce terms of an agreement

ICN + Blockchain:
- Enable untrusted producer nodes to join ICN
- Enable a decentralized access control system with proof of origin and delivery
Smart contract to provision producers on the edge network
Bringing content to the edge
Smart contract to provide access control to ICN

8x Labs Inc. Proprietary
07/15/2018
What’s Next?

• Generate Interest in the ICNRG community
  – Content/video distribution models
  – Filtering and secure dissemination models
  – Testbeds
  – Collaborations? Partnerships?

• Development
  – Secured funding for MVP
  – Goal is to produce a first version of our delivery content through ICN nodes and content servers inside ISPs and presented by our native and web video player
  – Integrate smart contracts to provision and incentivize untrusted ICN node in the network
  – Demo to the group?

• Potential IRTF draft to describe the more technical aspects of the work and generate research?