



# 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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# Today's Video Ecosystem Reality

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



	2015	2020
More Internet Users	3.0 Billion	4.1 Billion
More Devices and Connections	16.3 Billion	26.3 Billion
Faster Broadband Speeds	24.7 Mbps	47.7 Mbps
More Video Viewing	70% of Traffic	82% of Traffic

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

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## 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

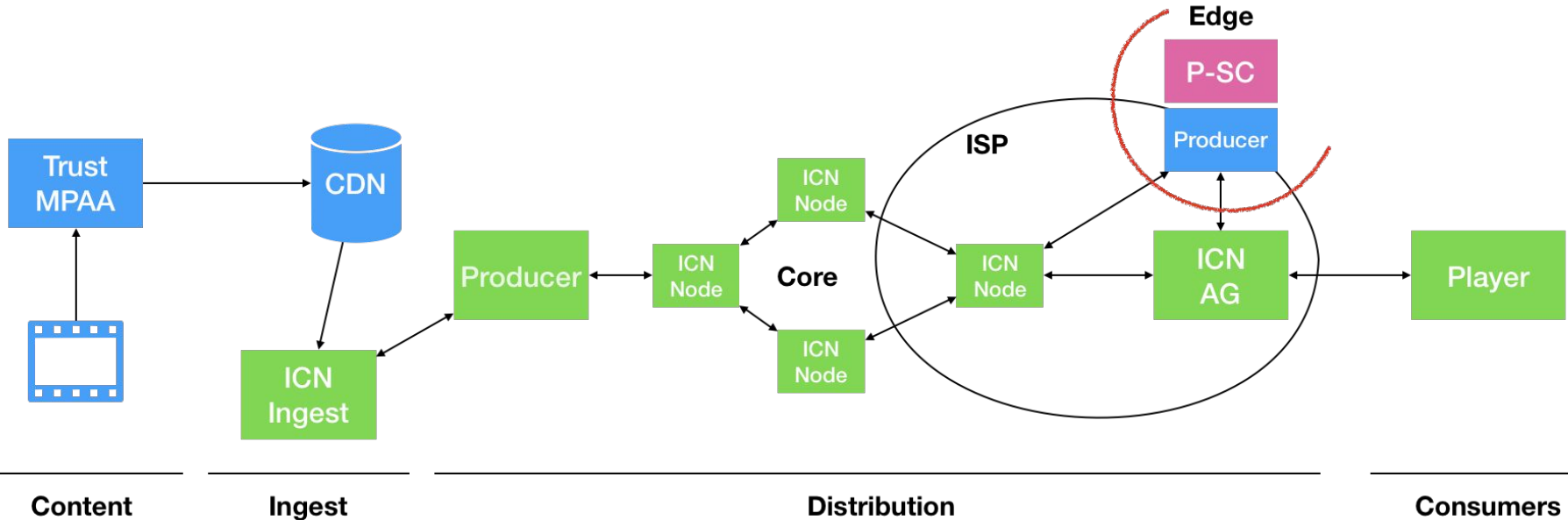
## Blockchain:

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

## ICN + Blockchain:

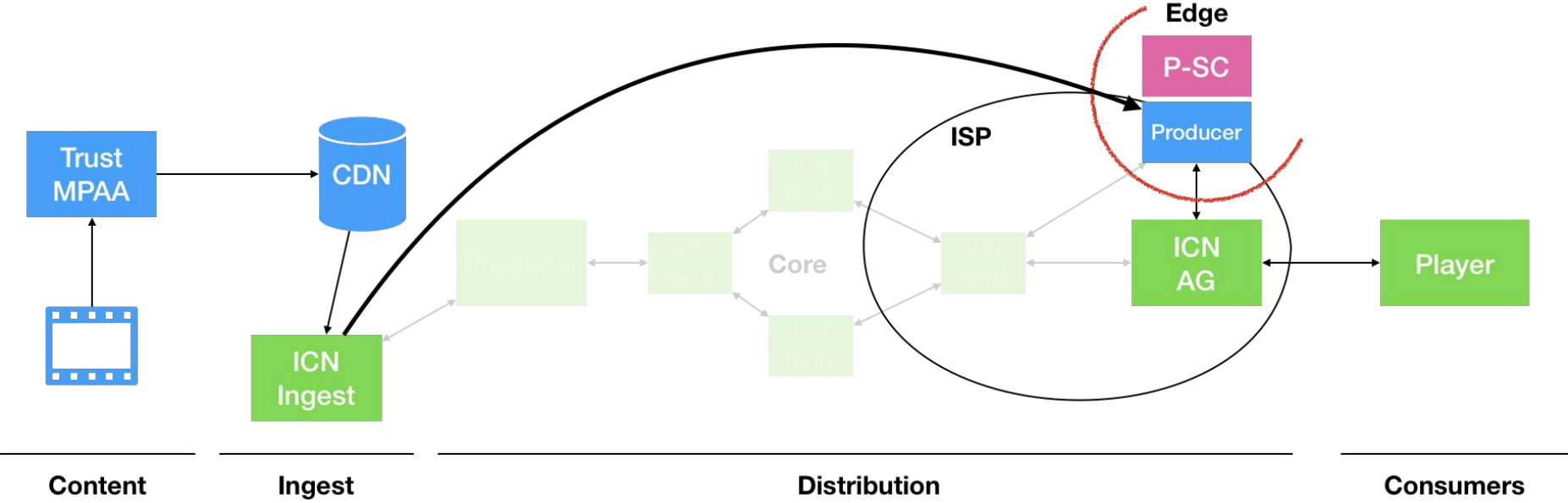
- Enable untrusted producer nodes to join ICN
- Enable a decentralized access control system with proof of origin and delivery

# Smart contract to provision producers on the edge network

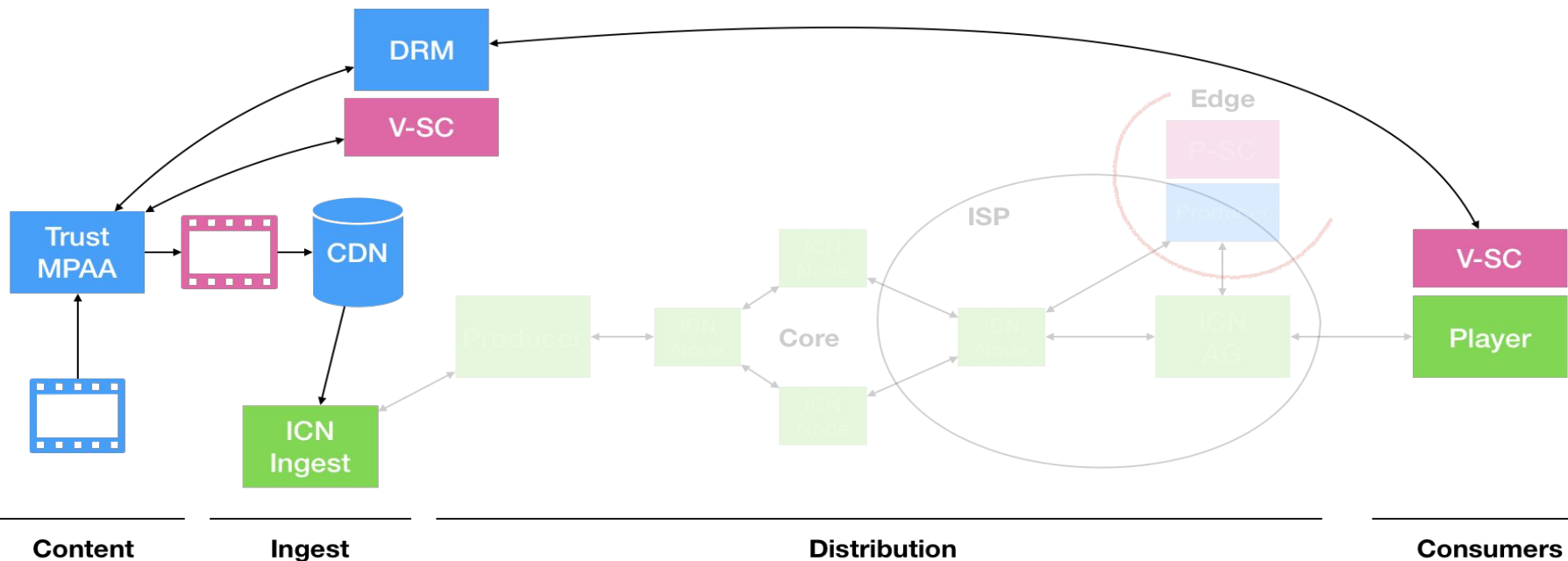




# Bringing content to the edge



# Smart contract to provide access control to ICN



# 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?**