

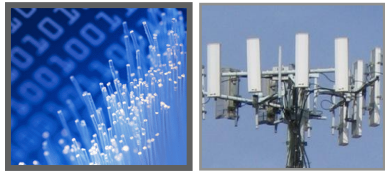


# Media Delivery Evolution

Doug Pasko

# Transformation

## Service Provider



## Experience Provider

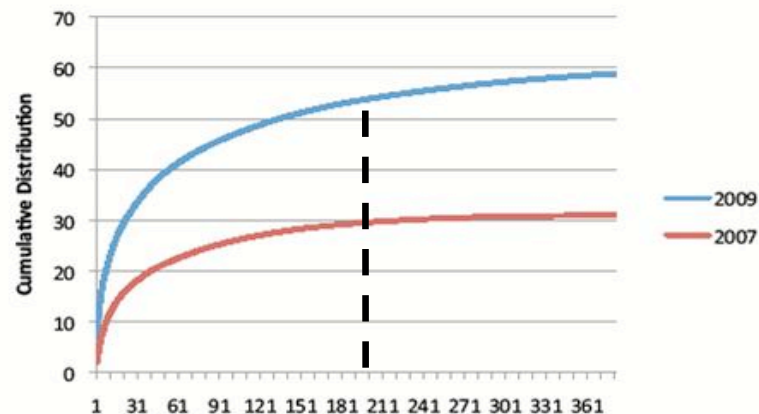


- Welcoming Content Distributors
- Competitive Services Welcome  
(Ex: Skype on Wireless, YouTube on FiOS TV)
- Verizon Developer Community
- Open Development Initiative

# Video is Driving Demand (No surprise here)

<u>Rank</u>	<u>Provider</u>	<u>%</u>
1	Google	5.03
2	Level(3)	1.78
3	LimeLight	1.52
4	Akamai	1.16
5	Microsoft	0.94
6	Verizon (19262)	0.77
7	Leaseweb	0.74
8	AT&T	0.73
9	Global Crossing	0.70
10	Carpathia Hosting	0.58

## Consolidation of Content *(Grouped Origin ASN)*

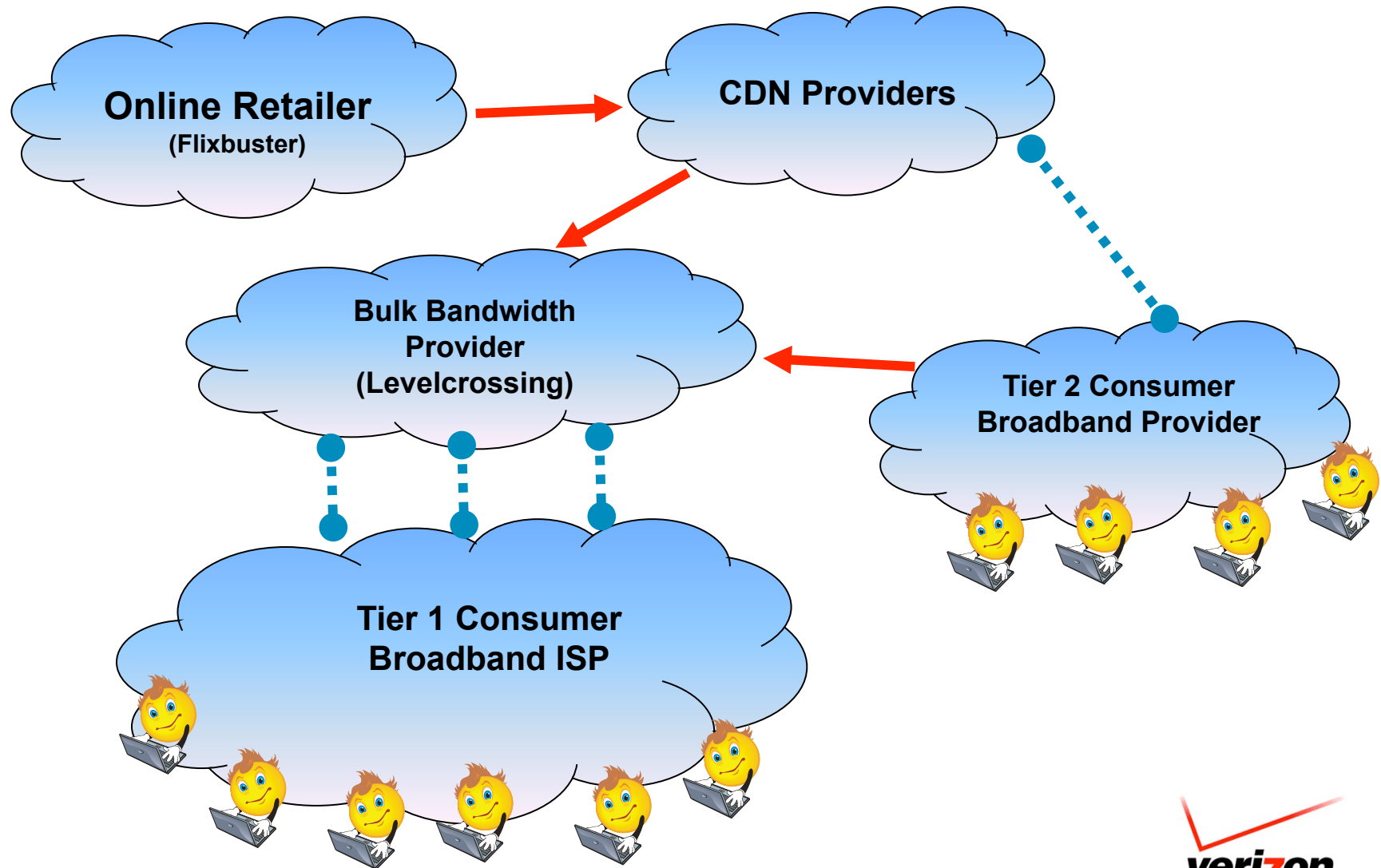


In 2007, thousands of ASNs contributed 50% of content  
In 2009, 150 ASNs contribute 50% of all Internet traffic  
Approximates a power law distribution

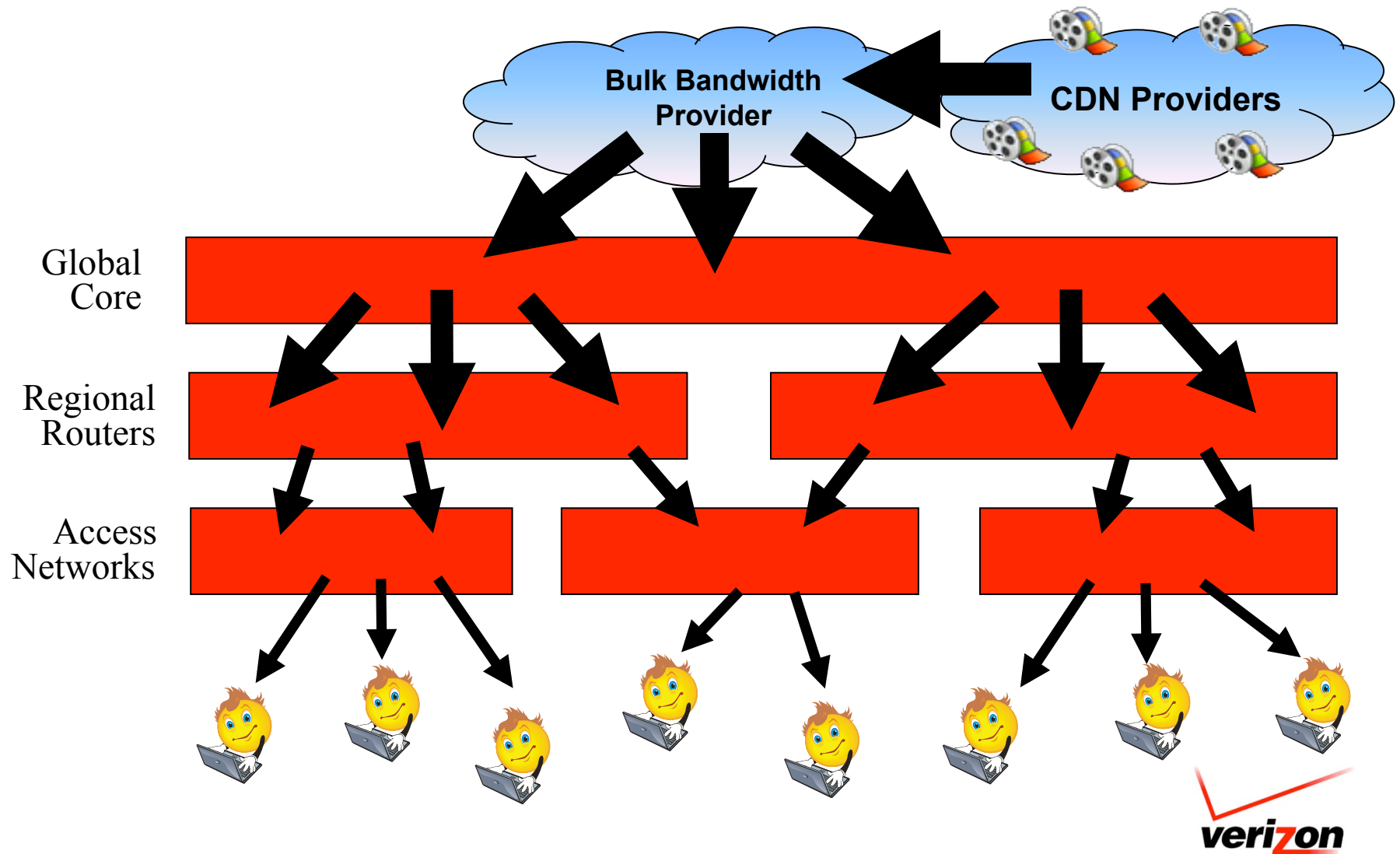
ATLAS Report for 2009: Originating Traffic



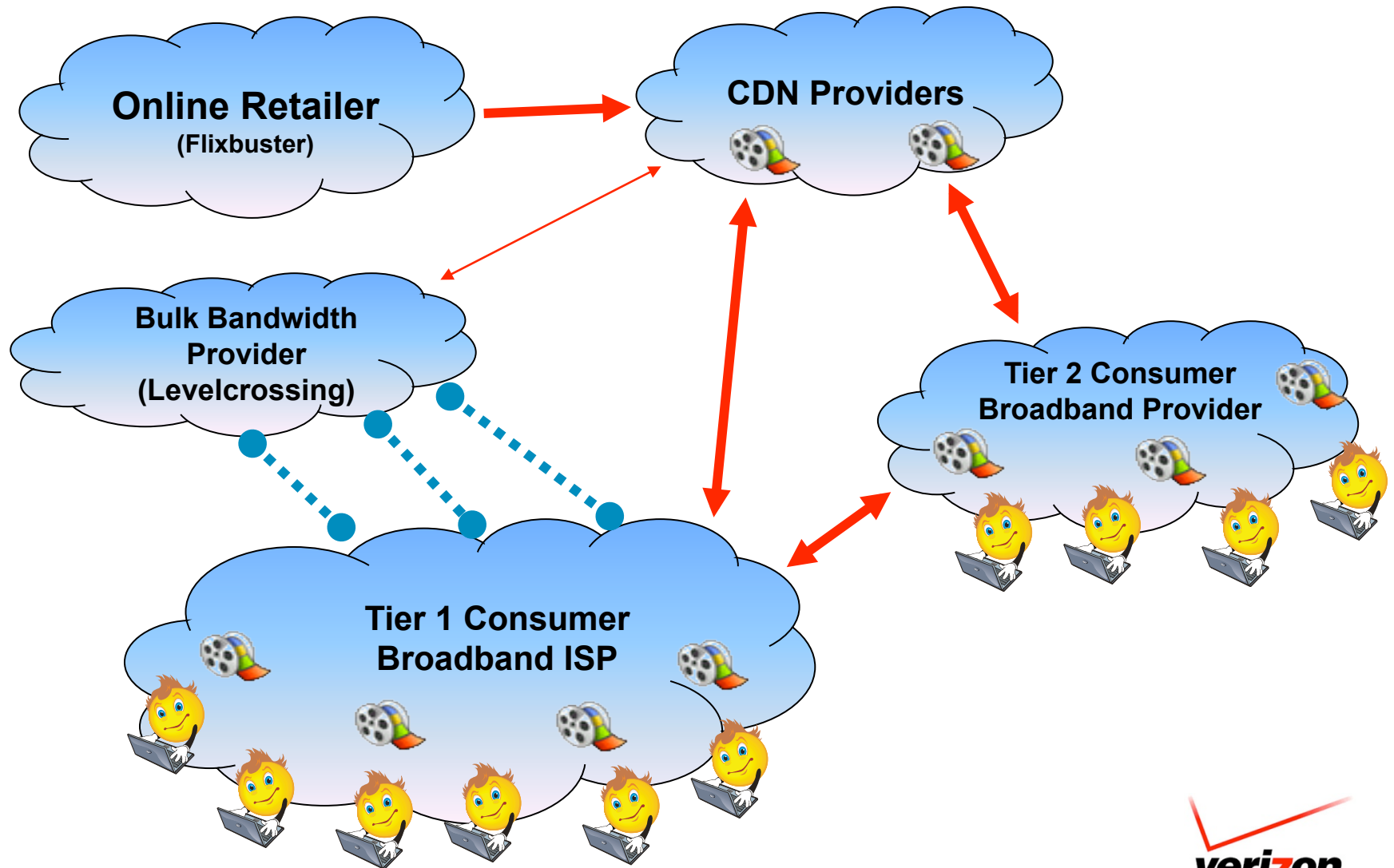
# The Existing Content Ecosystem



# Current Incremental Network Impacts

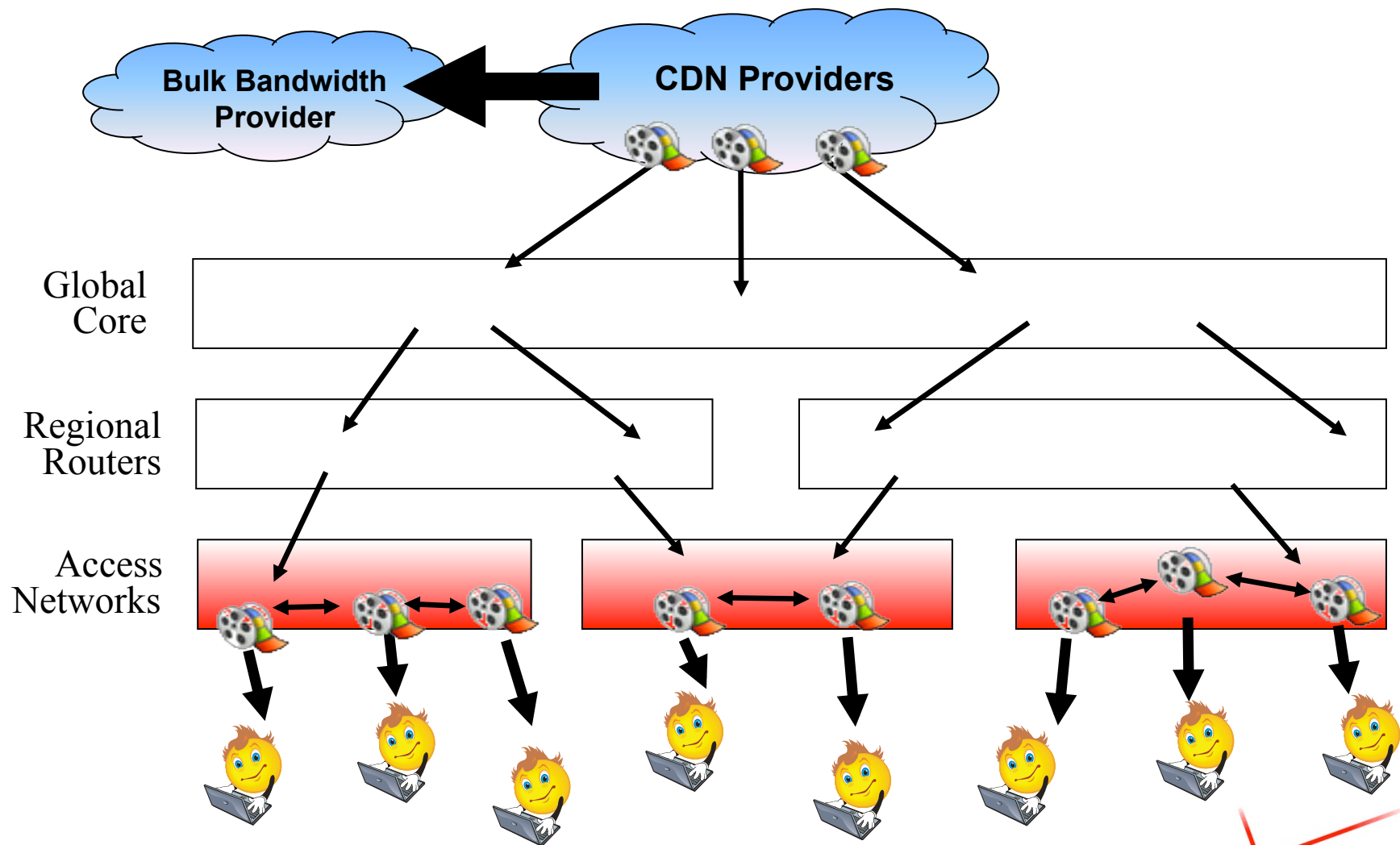


# An Alternative Content Ecosystem (Confederated CDNs)





# Incremental Network Impacts

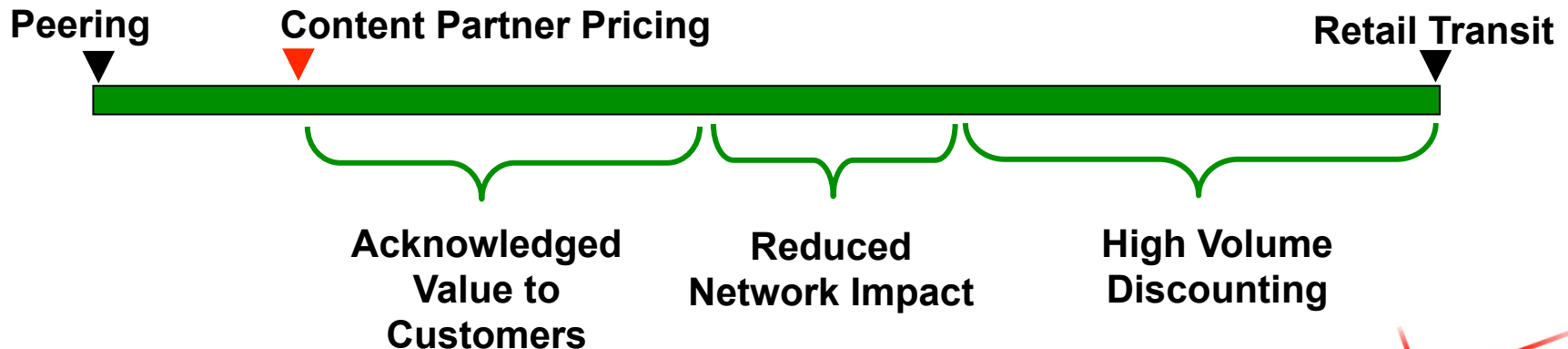


# Where to Start?

## Direct Connect Content Now

- Verizon's Partner Port 500 Gigabits/sec (2009)
- Projected 1 to 2 Terabit/sec (2010)

## How to Value?





# Embed CDN & Standardize

## Embed CDN Technology

- Deeply Deploy CDN Partner(s)
- Deploy Off the Shelf Boxes
- No CDN = No Participation = Poor Cost/Value

## New Standards Required

- Inter-CDN Cache Fill
- How to coordinate authorization
- Content control / purging
- Reporting & Statistics consolidation



# Closing Comments

