The State Of The CDN Market: Video Pricing, Contract, Volume and Market Sizing Trends

Detailed pricing data can be seen at:

www.cdnpricing.com
www.cdnlist.com
www.contentdeliveryblog.com

Note: Data from these slides can be used by anyone but please credit Dan Rayburn at cdnpricing.com

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Discussion Topics

- Segmentation of CDN market; new entrants
- Market size for CDN services; video contribution
- CDN growth trends; software downloads, gaming and other forms of non-video content
- Telco and carrier deployments (mostly resale)
- Volume customers move to in-house CDNs (not a trend, Apple still building)
- Amazon growing, biggest potential to disrupt the market
- QoS data: CDNs still have a long way to go with regards to quality
- The real impact of 4K and mobile on vendors in the CDN industry

- Latest pricing trends from March/April 2015 CDN survey

- Q&A

Latest Market Trends

- Commodity CDN pricing stable, down 20% last year
- Expected to be down 15% this year
- Customers seeing good volume growth, but no major catalyst
- New OTT services from Sling TV, PlayStation Vue etc. not big drivers
- Some customers moving to in-house CDNs, but not a trend
- Software and large object downloads driving the growth in M&E vertical
- Impact of mobile devices not a major force - yet
- 4K streaming won't impact CDNs for years to come
- "If" Apple comes out with subscription service, growth to CDNs will be limited
- Many new entrants and small vendors growing, only focusing on value add services, content/mobile acceleration: Fastly, Yottaa, Instart Logic, TwinPrime, Rev SW, Kwicr
- Delivering video isn't (very) profitable, unless you own the network
- Video takes up the largest % of traffic on a CDN, but contributes the least amount of profitable revenue
- Volume based business, economics of scale, traffic growing, but no true catalyst that will make it pop
- Acquisitions will happen, but not for video CDN services
- Vendors have gotten extremely focused, realize that video/media/downloads is more of a check box for full-service CDNs
- Azure's partnership with EdgeCast (Verizon)
- Even with these threats, CDNs should be able to grow their media business 12-18% this year

Q4 Large File Delivery/Events

- Monday Night Football (WatchESPN)
- Apple's Product Announcement (Tuesday)
- Microsoft Security Patches (Tuesday)
- NFL Now/Game Rewind Highlights (Tuesday is busiest day for NFL videos)
- Yahoo! Aerosmith Concert (Tuesday)
- Bungie's Release Of Destiny Game (Tuesday)
- EA Sports FIFA 15 Game Beta (Tuesday)
- EA Sports NHL 15 Game (Tuesday)
- League Of Legends NA/Europe Seed Matches (Tuesday)
- Xbox Free Game Releases (including Halo: Reach)
- Sony PS4 White Destiny Bundle (Tuesday)
- New York Fashion Week Live (Monday-Thursday)
- Apple's iOS 8 Download (Thursday)
- President's ISIS Speech (Wednesday)

***CDN Vendor Revenue**: CDN Service Providers Will Generate $4B In Revenue From Media & Software Delivery in 2015*

Edgecast $100M in 2013
EdgeCast $130M in 2014
EdgeCast $180M in 2015*
(*Acceleration, Security, LCDN)
CDN Revenue: $125 (70% of total revenue)

Level 3 $130M in 2013
Level 3 $180M in 2014
Level 3 $235M in 2015*
(*All CDN/Media Delivery)
CDN Revenue: $235M (100% of total revenue)

Limelight $173M in 2013
Limelight $162M in 2014
Limelight $164-$170M in 2015*
(*Acceleration, Security, OVP)
CDN: $120M (75% of total revenue)

Fastly $5M in 2013
Fastly $15M in 2014
Fastly $60M in 2015*
(*Acceleration, Private CDN)
CDN: $9M (15% of total revenue)

Akamai $757M in 2013
Akamai $912M in 2014
Akamai $1.03BM in 2015*
(*DSA, security, performance or professional services)

Amazon $4.5B in 2014
Amazon $6B in 2015*
(*dynamic, storage, compute etc.)
CDN: $1.8B (30% of total revenue) but big storage %

Highwinds $100M in 2013
Highwinds $120M in 2014
Highwinds $135M in 2015*
(*NNTP delivery, transit, co-lo)
CDN: $95M (70% of total revenue)

ChinaCache $182M in 2013
ChinaCache $223M in 2014
ChinaCache $270M in 2015*
(*Cloud, Acceleration)
CDN: $81M (30% of total revenue)

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Akamai $1.03BM in 2015*
(* includes video, software, object delivery, storage) **CDN Revenue: $700M** (70% of total media revenue)

Amazon $6B in 2015*
(*dynamic, storage, compute etc.)
CDN: $1.8B (30% of total revenue) but big storage %

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Rest of smaller regional CDNs (MaxCDN etc.) $100M combined.

- Numbers do not include revenue from hosting providers or carrier revenue from MCDN/LCDN, but does include re-sellers.
- Numbers do not include revenue from security service, dynamic content delivery, app acceleration, professional services.

The Reality Of 4K Streaming

- 4K streaming, also called Ultra HD, is NOT coming to the masses soon, or even in the next few years.
- The average Netflix stream across the top 10 ISPs in their ISP Speed Index rating, is delivered at 3.5Mbps
- Amazon, Netflix and Comcast have all announced 4K streaming projects, at between 15-20Mbps. All three of them deliver their own content, (Amazon still uses third party CDNs for small volume) so CDNs won't benefit from those really pushing 4K or the adoption of any of these three services
- The latest data from Conviva, which classifies HD as between 1-2Mbps, shows that as a whole, CDNs still have a lot of problems delivering content at 2Mbps, with reliable quality.
- A content owner who wants to have 25% of their traffic come from content at 4K will see their monthly bandwidth bill increase by an average of 40%-50%, each month, even with a volume discount
- The majority of all content owners will not be able to offer a lot of content in 4K. Many, especially those supported by ads, won't be able to offer any, as they their business models don't support it.
- Even Netflix has said that they will offer only a "limited" amount of content in 4K (Super HD) for the foreseeable future.

Bottom line: 4K streaming is not going to drive revenue growth for any CDN. If they say otherwise, it's simply marketing. 4K streaming is more than a technology problem, it's a business problem.

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The Latest On Video CDN Pricing

- For 2014, pricing down 20% on average
- Pricing decline for all of 2015 expected to be 15% (lowest decline ever)
- Major pricing decline not coming soon, traffic growth drives pricing declines

- Mobile (tablets) are not a big driver of video traffic (1/4 the number of bits)
- Majority of video to mobile is still WiFi, not 3G/4G
- Traffic, specifically for video, is growing, but small % of content owners make up the largest % of traffic growth

March/April 2015 Pricing Survey

- Just over 700 “qualified” surveys completed in the month of March/April
- All questions specific to video delivery pricing from major commercial CDNs
- 15 questions covered pricing, volume, contract length, vendors used, traffic growth
- Data broken out by size of customer, based on contract value

THERE ARE A LOT OF VARIABLES! - THIS IS ONLY AN ESTIMATE.

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Customers spending more than $1M per year

2015
- on average, pricing down 31% this year
- on average, customers expect traffic to grow 164% this year (2013 was 126%)
- on average, customers doing 10PB a month, paying low of $0.006 per GB, high $0.01 per GB
- per Mbps pricing, customers doing over 900 Mbps, paying a low of less than $1 per Mbps, high of $1.40 per Mbps

2014
- on average, pricing down 26% this year (2013 was 19%)
- on average, customers expect traffic to grow 186% this year (2013 was 126%)
- on average, customers doing 7PB a month, paying low of $0.007 per GB, high $0.02 per GB
- per Mbps pricing, don’t have enough data, only 4 contracts priced on per Mbps

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Customers spending $500K-$1M per year

2015
- on average, pricing was down 22% this year when compared to last year's contract
- on average, customers expect traffic to grow 83% this year over last year (*no 2013 data)
- on average, customers doing 2-4PB a month, paying low of $0.008 per GB, high $0.015 per GB
- per Mbps pricing, don't have enough data, too few contracts priced on per Mbps

2014
- on average, pricing was down 20% this year when compared to last year's contract
- on average, customers expect traffic to grow 60% this year over last year (*no 2013 data)
- on average, customers doing 2-4PB a month, paying low of $0.01 per GB, high $0.03 per GB
- per Mbps pricing, don't have enough data, only 2 contracts priced on per Mbps

Customers spending $250K-$500K per year

2015
- on average, pricing was down 12% this year when compared to last year's contract
- on average, customers expect traffic to grow 68% this year over last year
- on average, customers doing 4PB a month, paying low of $0.01 per GB, high $0.03 per GB
- per Mbps pricing, don’t have enough data, only two contracts priced on per Mbps

2014
- on average, pricing was down 14% this year when compared to last year's contract
- on average, customers expect traffic to grow 78% this year over last year
- on average, customers doing 2PB a month, paying low of $0.02 per GB, high $0.05 per GB
- per Mbps pricing, don’t have enough data, only 1 contract priced on per Mbps

I Know About The CDN Market Because Of People Smarter Than Me
Read post: http://bit.ly/1tARhUT

"I've spent the last seventeen years tracking the CDN market, talking to vendors, customers, policy makers, telcos, carries, MSOs and Wall Street money managers. But I want to point out that I don't know everything there is to know about the CDN market and CDN related technology."

"I get to speak to the smartest people who are building, running and using the largest private and public CDN related networks around. One's self-importance is not based on what they know, but what they can share with others, which is my only goal."

INFORM – EDUCATE – EMPOWER

Thank you to all the customers & vendors who trust me with their data

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Questions and Additional Resources

www.cdnlist.com
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