



Middle Eastern Content Hosting in 2015

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MENOG 15

Dubai, April 2015

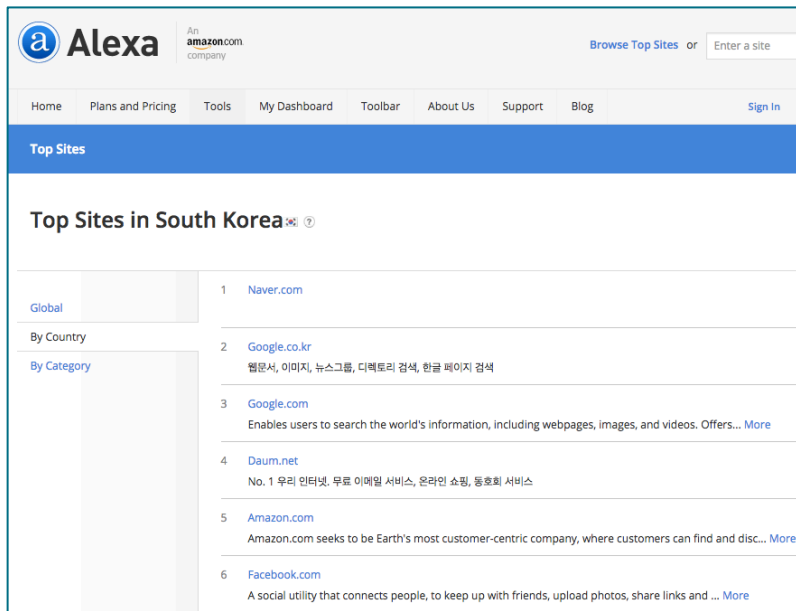
Where is Content Hosted - And Why Does it Matter?

- Hosting content locally improves latencies, which drive **customer experience**
- Local hosting also increases the amount of traffic exchanged on-net domestically
- Why should a country spend \$ on foreign transit? Grow your own - or attract “content investment” and have it hosted locally.



Where's Each Country's Popular Content Hosted?

- Let's examine the **Alexa** top 100 domains



The screenshot shows the Alexa website interface. At the top, there's the Alexa logo and navigation links like 'Home', 'Plans and Pricing', 'Tools', 'My Dashboard', 'Toolbar', 'About Us', 'Support', 'Blog', and 'Sign In'. Below the navigation bar, there's a section titled 'Top Sites' with a sub-header 'Top Sites in South Korea'. A sidebar on the left allows filtering by 'Global', 'By Country', and 'By Category'. The main content area displays a list of top sites in South Korea, ranked 1 through 6.

Rank	Site	Description
1	Naver.com	
2	Google.co.kr	웹문서, 이미지, 뉴스그룹, 디렉토리 검색, 한글 페이지 검색
3	Google.com	Enables users to search the world's information, including webpages, images, and videos. Offers... More
4	Daum.net	No. 1 우리 인터넷. 무료 이메일 서비스, 온라인 쇼핑, 동호회 서비스
5	Amazon.com	Amazon.com seeks to be Earth's most customer-centric company, where customers can find and disc... More
6	Facebook.com	A social utility that connects people, to keep up with friends, upload photos, share links and ... More

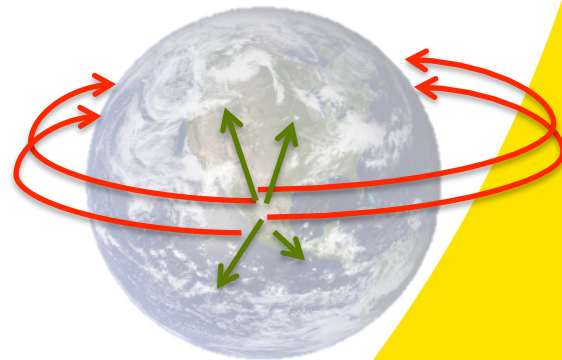
Where's Each Country's Popular Content Hosted?

- Let's examine the **Alexa top 100** domains
- Use up to **50 open resolvers**** in each country to resolve those domains to IP addresses

** For research purposes only; not evil

Where's Each Country's Popular Content Hosted?

- Let's examine the **Alexa top 100** domains
- Use up to **50 open resolvers** in each country to resolve those domains locally to IP addresses
- **Geolocate** those IP addresses to determine which provider hosts them, and where



EXAMPLE:

CONTENT BY COUNTRY

United Arab Emirates

Self-Hosting: 9%

Imports from :

North America 64%

Western Europe 18%

Other Asia 4%

Exports to:

Pakistan, Iran, Qatar

Local hosting (out of 100):

- [Google.com](#) (20%)
- [Google.ae](#) (36%)
- [Youtube.com](#) (20%)
- [emiratesnbd.com](#)
- [banknetpower.net](#)
- [khaleejtimes.com](#)
- [Google.co.uk](#) (36%)
- [du.ae](#)
- [Google.co.in](#) (45%)
- [etisalat.ae](#)
- [skynewsarabia.com](#)

Qatar

Self-Hosting: 9%

Imports from :

North America	43%
Western Europe	22%
Other	9%

Exports to:

Saudia Arabia, UAE

Local hosting (out of 100):

- [google.com](#) (85%)
- [youtube.com](#) (85%)
- [google.com.qa](#) (94%)
- [aljazeera.net](#) (33%)
- [qatarairways.com](#)
- [google.com.eg](#) (94%)
- [qu.edu.qa](#)
- [ooredoo.qa](#)
- [qatar.net.qa](#)
- [google.jo](#) (94%)

Kingdom of Saudi Arabia

Self-Hosting: 15%

Imports from :

North America	51%
Western Europe	23%
Other	11%

Exports to:

Algeria (liberte-algerie.com)

Local hosting (out of 100):

- moi.gov.sa
- alriyadh.com
- alrajhibank.com.sa
- ksu.edu.sa
- hawamer.com
- stc.com.sa
- tadawul.com.sa
- hafiz.gov.sa
- okaz.com.sa
- alahlionline.com
- mol.gov.sa
- sp.com.sa
- kau.edu.sa

Egypt

Self-Hosting: 15%

Imports from :

North America	59%
Western Europe	17%
Other	9%

Exports to:

Saudi Arabia, Sri Lanka

Local hosting (out of 100):

- [google.com.eg](#) (80%)
- [google.com](#) (62%)
- [youtube.com](#) (65%)
- [albawabhnews.com](#)
- [masrawy.com](#)
- [akhbarak.net](#)
- [yallakora.com](#)
- [masralarabia.com](#)
- [fatakat.com](#)
- [ahram.org.eg](#)
- [mobinil.com](#)
- [almesryoon.com](#)
- [yellowpages.com.eg](#)
- [vodafone.com.eg](#)

Turkey

Self-Hosting: 54%

Imports from :

North America 29%

Western Europe 14%

Other 3%

Exports to:

**Iran, Malaysia, Bulgaria,
Azerbaijan, Cyprus**

Local hosting:

- trgino.com
- hurriyet.com.tr
- milliyet.com.tr
- sahibinden.com
- eksisozluk.com
- haber7.com
- mackolik.com
- mynet.com
- sahadan.com
- oyunskor.com
- gittigidiyor.com
- internethaber.com
- donanimhaber.com
- garanti.com.tr
- haberturk.com
- sporx.com
- ensonhaber.com
- hepsiburada.com
- sozcu.com.tr
- radikal.com.tr
- n11.com
- sabah.com.tr
- teknoter.com
- wmaraci.com
- haberler.com
- uludagsozluk.com
- samanyoluhaber.com
- tascatlasa.com
- kariyer.net
- hurriyetemlak.com
- fanatik.com.tr
- ntv.com.tr
- misli.com
- yemeksepeti.com
- sanalpazar.com
- bursadabugun.com
- cumhuriyet.com.tr
- isbank.com.tr
- ligtv.com.tr
- shiftdelete.net
- yemeksepeti.com
- sanalpazar.com
- bursadabugun.com
- cumhuriyet.com.tr
- isbank.com.tr
- ligtv.com.tr
- shiftdelete.net
- shiftdelete.net
- cnnturk.com
- vatanbilgisayar.com
- izlesene.com
- acunn.com
- yapikredi.com.tr
- odativ.com
- akakce.com
- yenibiris.com
- ntvspor.net
- meb.gov.tr
- ajanshaber.com
- startv.com.tr
- memurlar.net

Iran

Self-Hosting: 65%

Imports from :

North America 19%

Western Europe 11%

Other 5%

Exports to:

Nobody

Local hosting:

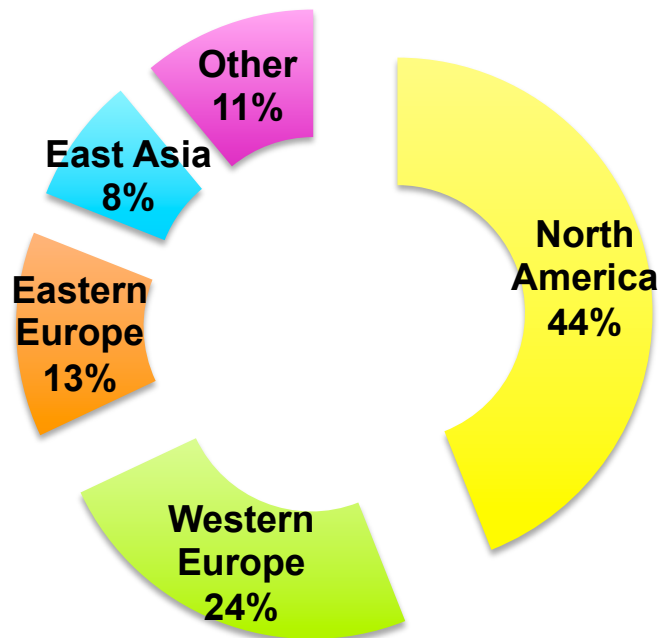
- varzesh3.com
- aparat.com
- digikala.com
- mihanblog.com
- facenama.com
- shaparak.ir
- bankmellat.ir
- tabnak.ir
- popupads.ir
- cloob.com
- picofile.com
- rozblog.com
- final.ir
- bmi.ir
- peyvandha.ir
- shahrekhabar.com
- asriran.com
- yjc.ir
- mashreghnews.ir
- tebyan.net
- sanjesh.org
- divar.ir
- tasnimnews.com
- khabaronline.ir
- bartarinha.ir
- irpopup.ir
- blog.ir
- isna.ir
- uast.ac.ir
- popmaster.ir
- khabarpu.com
- medu.ir
- jamnews.ir
- bama.ir
- downloadha.com
- mehrnews.com
- rightel.ir
- p30download.com
- afkarnews.ir
- fararu.com
- pop-music.ir
- persianv.com
- irna.ir
- soft98.ir
- 90tv.ir
- kanoon.ir
- mci.ir
- tsetmc.com
- pardad.ir
- 98ia.com
- irib.ir
- e-estekhdam.com
- tnews.ir
- ninisite.com
- tamin.ir
- loxblog.com
- entekhab.ir
- namnak.com
- sarzamindownload.com
- snn.ir
- jahannews.com
- alef.ir
- nex1music.com
- jamejamonline.ir

CONTENT HOSTING

IS A KIND OF

IMPORT/EXPORT

More Than 2/3 of Hot Global Content still “lives” in North America/Western Europe

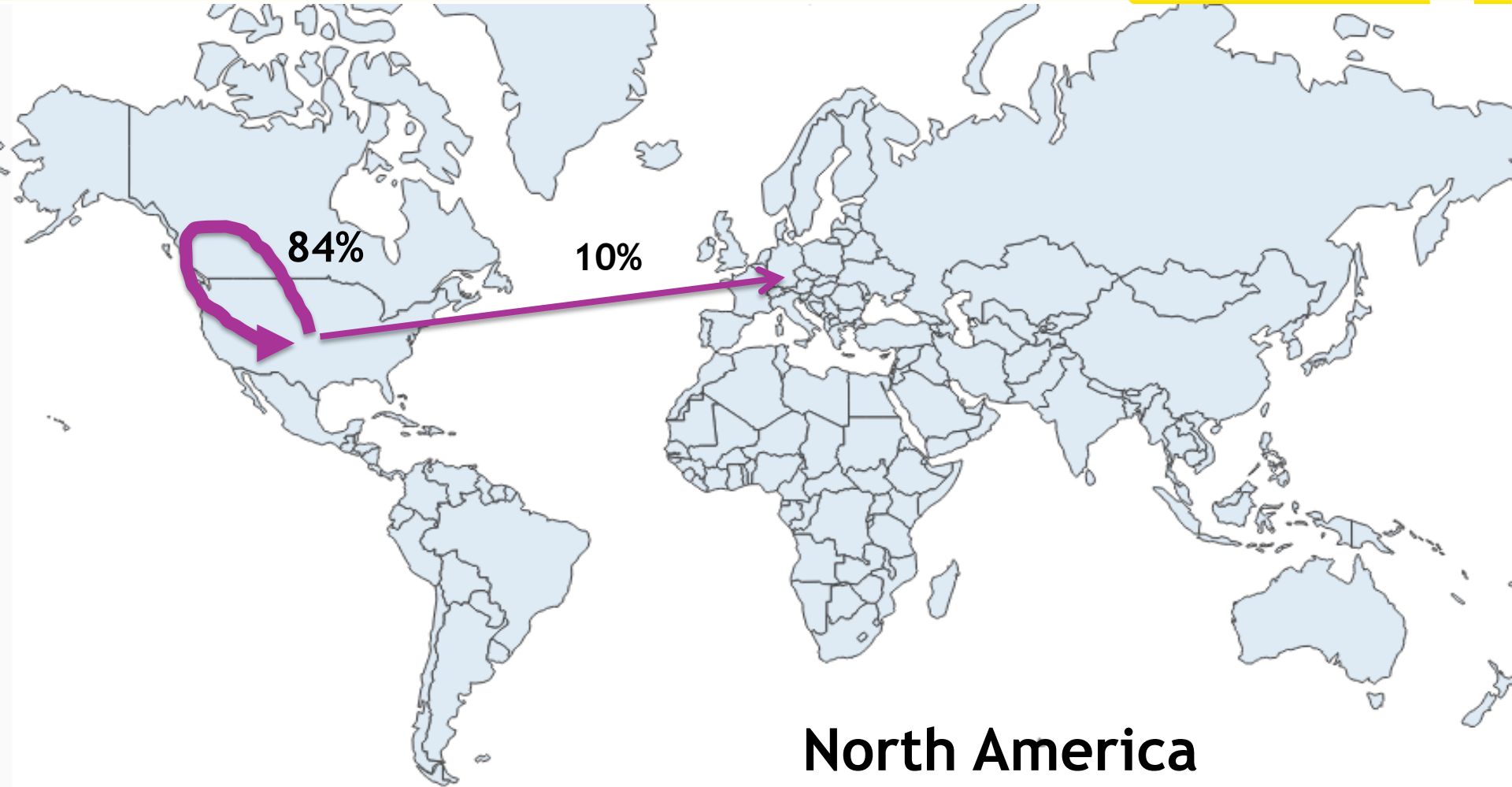


‘Other:’

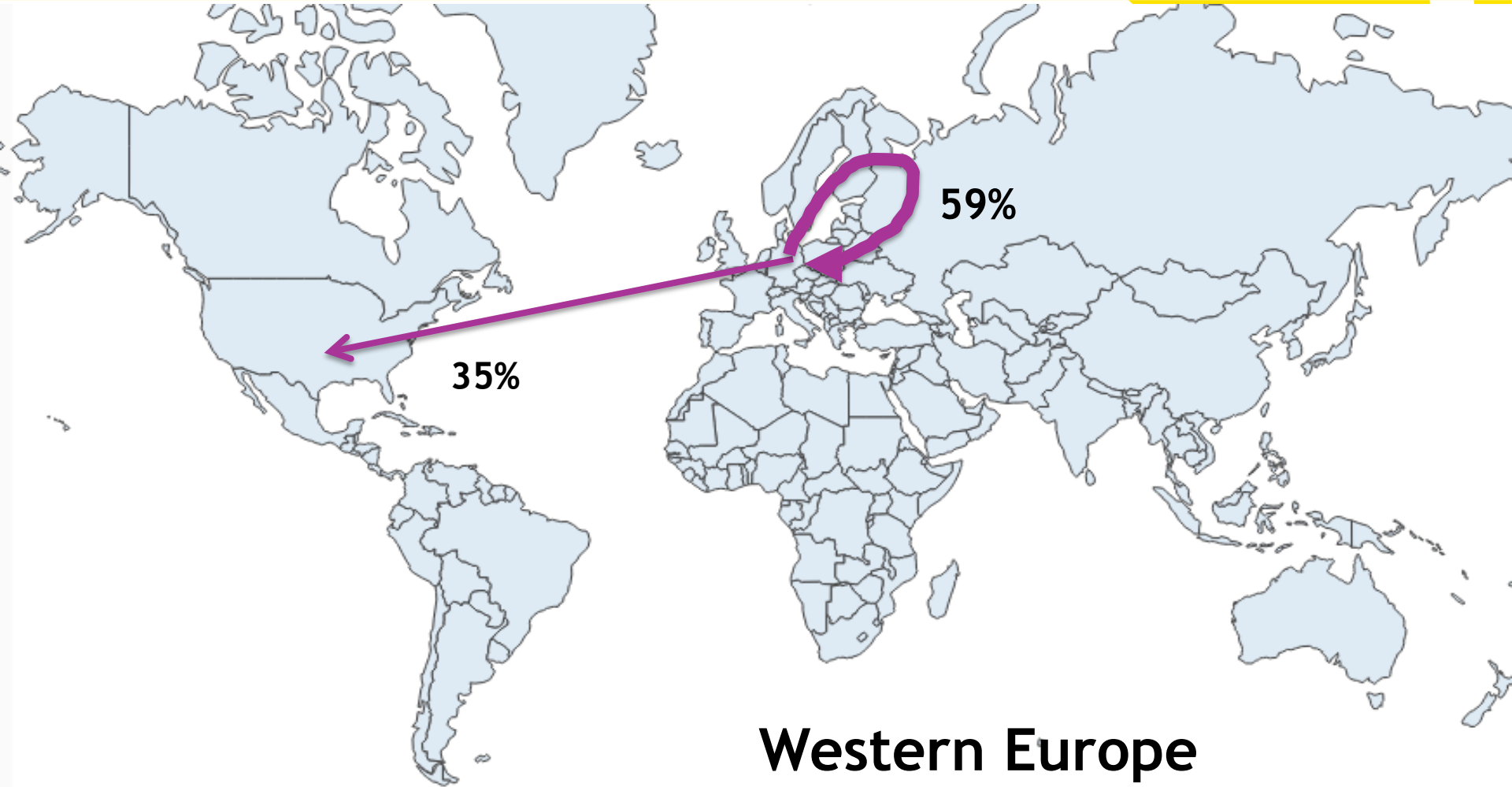
Middle East	...2%
South America	...2%
South Asia/Oceania	...2%
Central America/ Caribbean	...1%
Africa	...1%
Central Asia	...<1%
Private/unknown	...2%

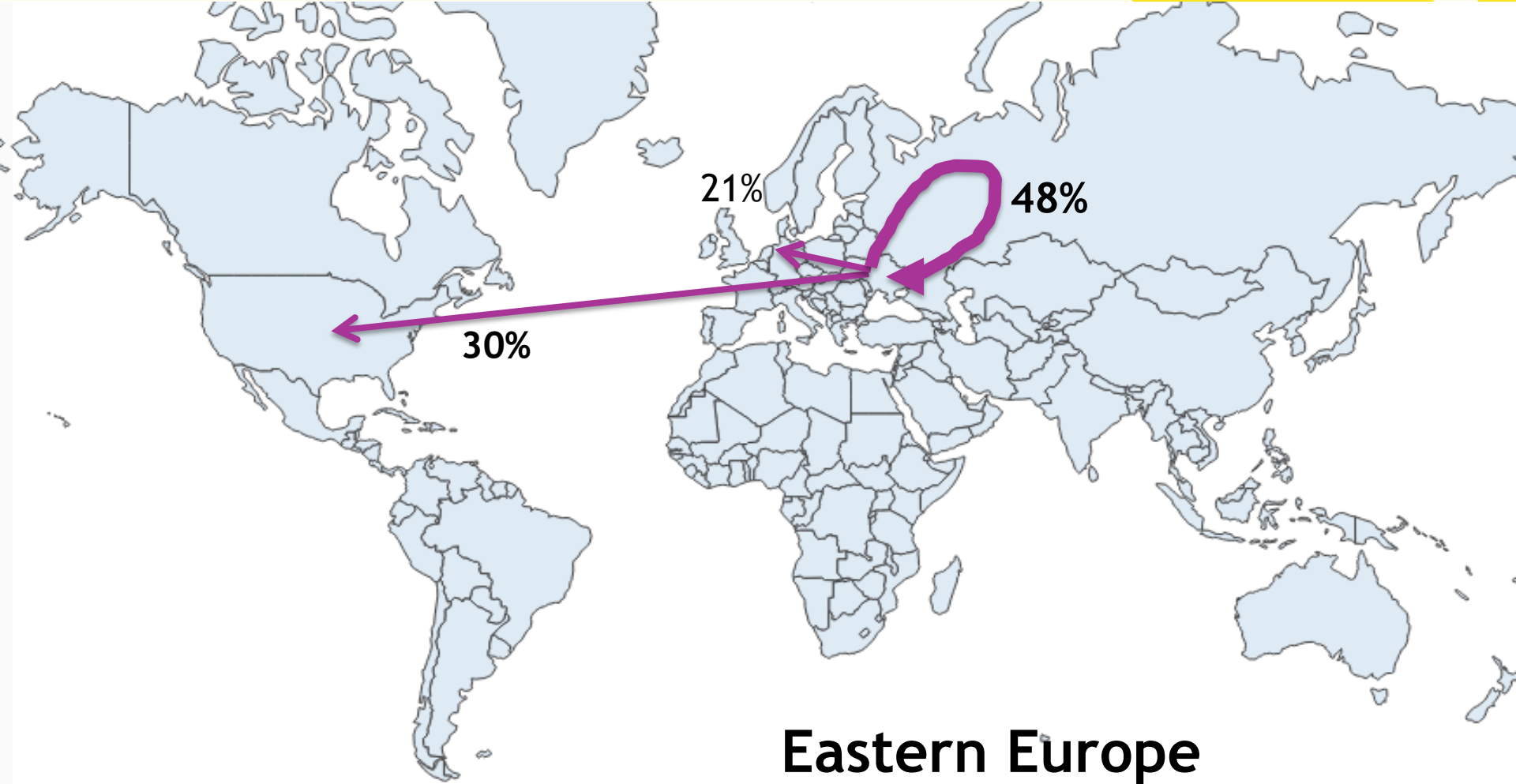
In a perfect world, all content would be local

- Each region would host most of its consumed content within its own boundaries.
- CDNs help this situation significantly, but “primary content hosting” arguably more important for building local IT industry
- How are we doing worldwide?

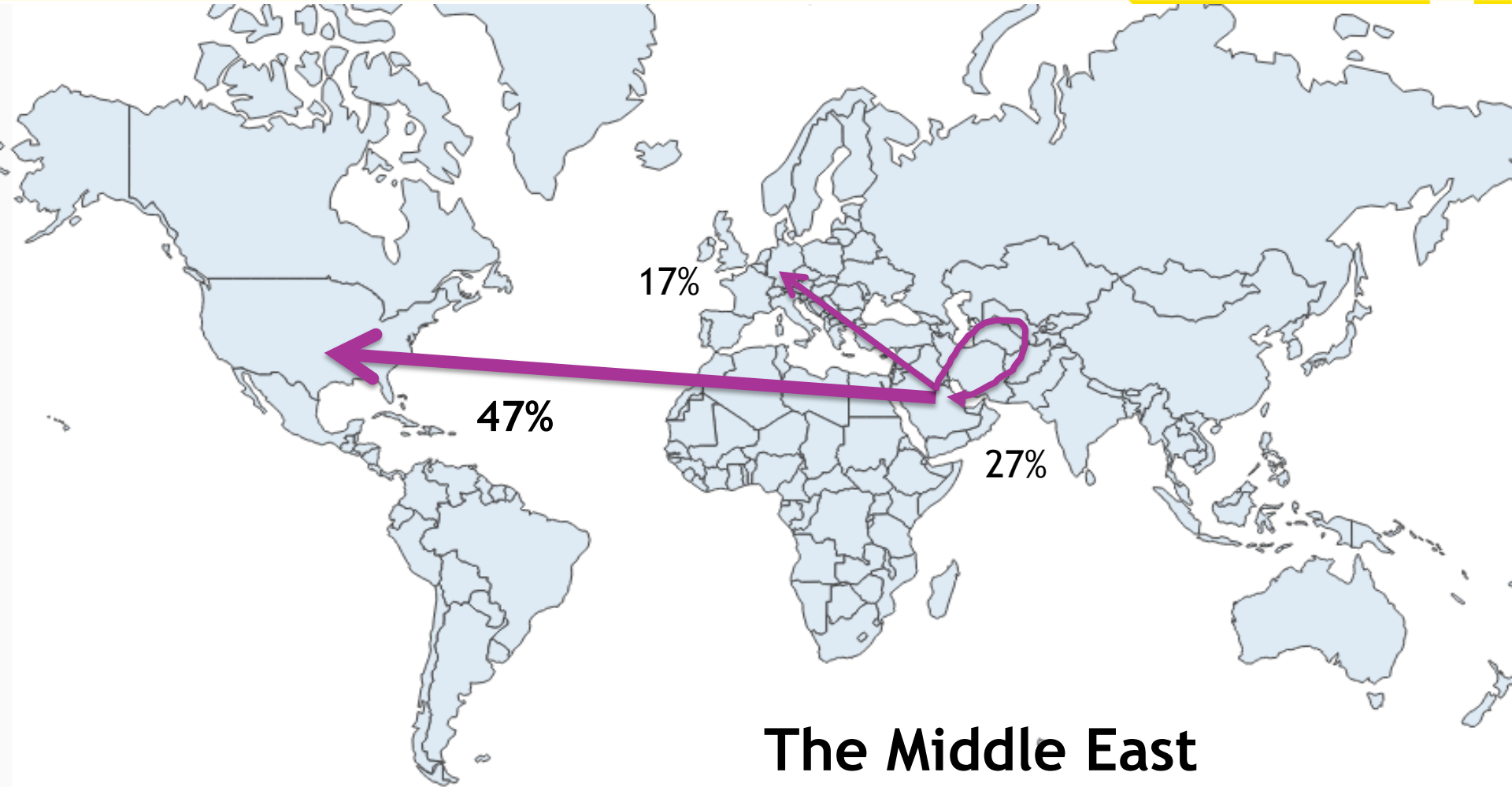


North America

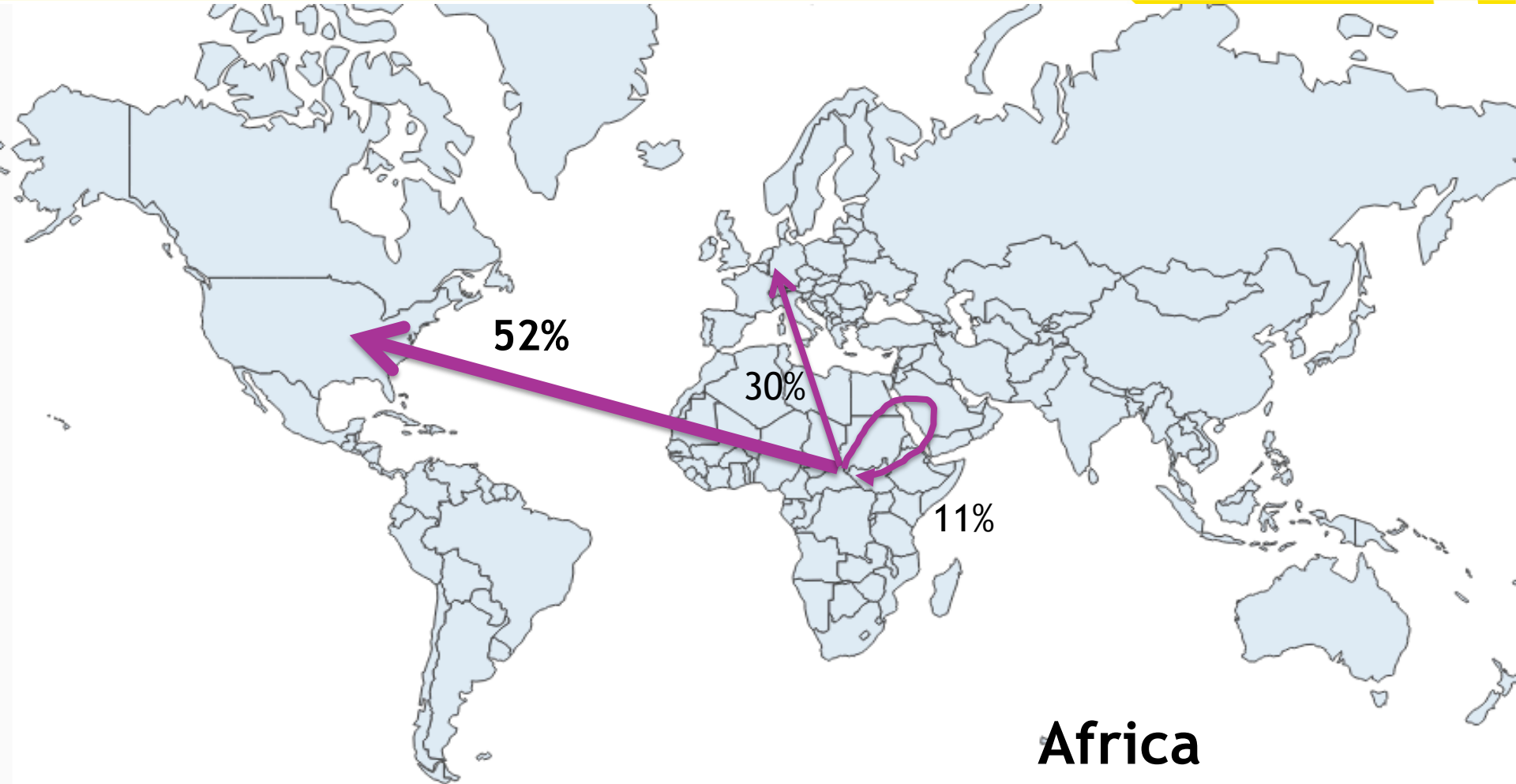


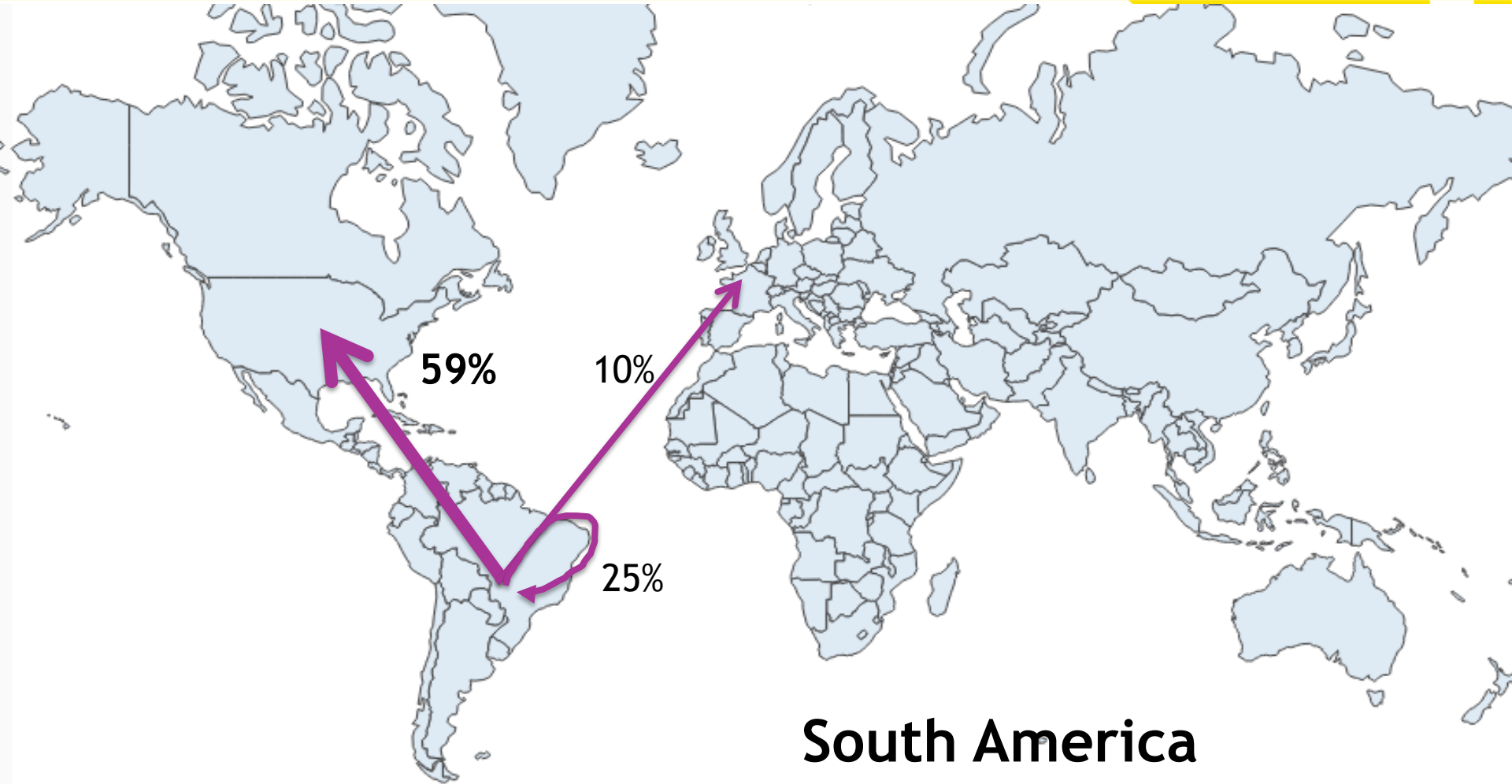


Eastern Europe



The Middle East





South America

USA (90%)
suppresses local
hosting for the
Western
Hemisphere:

- Canada (16%)
Mexico (17%)
- Panama (15%)
- Costa Rica (15%)
- Colombia (8%)

Median: 33%

Russia: 55%

China: 85%

Iran: 65%

Vietnam: 71%

Self-Hosting % of Alexa Top 100

Regional Self-Hosting Percentages

- North America .. 84%
- Western Europe .. 59%
- Eastern Europe .. 48%
- Oceania .. 32%
- **Middle East .. 27%**
- South America .. 25%
- South Asia .. 15%
- Africa .. 11%

Worldwide national
median is 33%



National Self-Hosting Percentages, Middle East

- Iran .. 65%
- Turkey .. 54%
- Israel .. 45%
- **Middle East** .. **27%**
- Egypt .. 15%
- Saudi Arabia .. 15%
- UAE .. 9%
- Qatar .. 9%
- Jordan .. 1%

UAE-local hosting is
still challenging

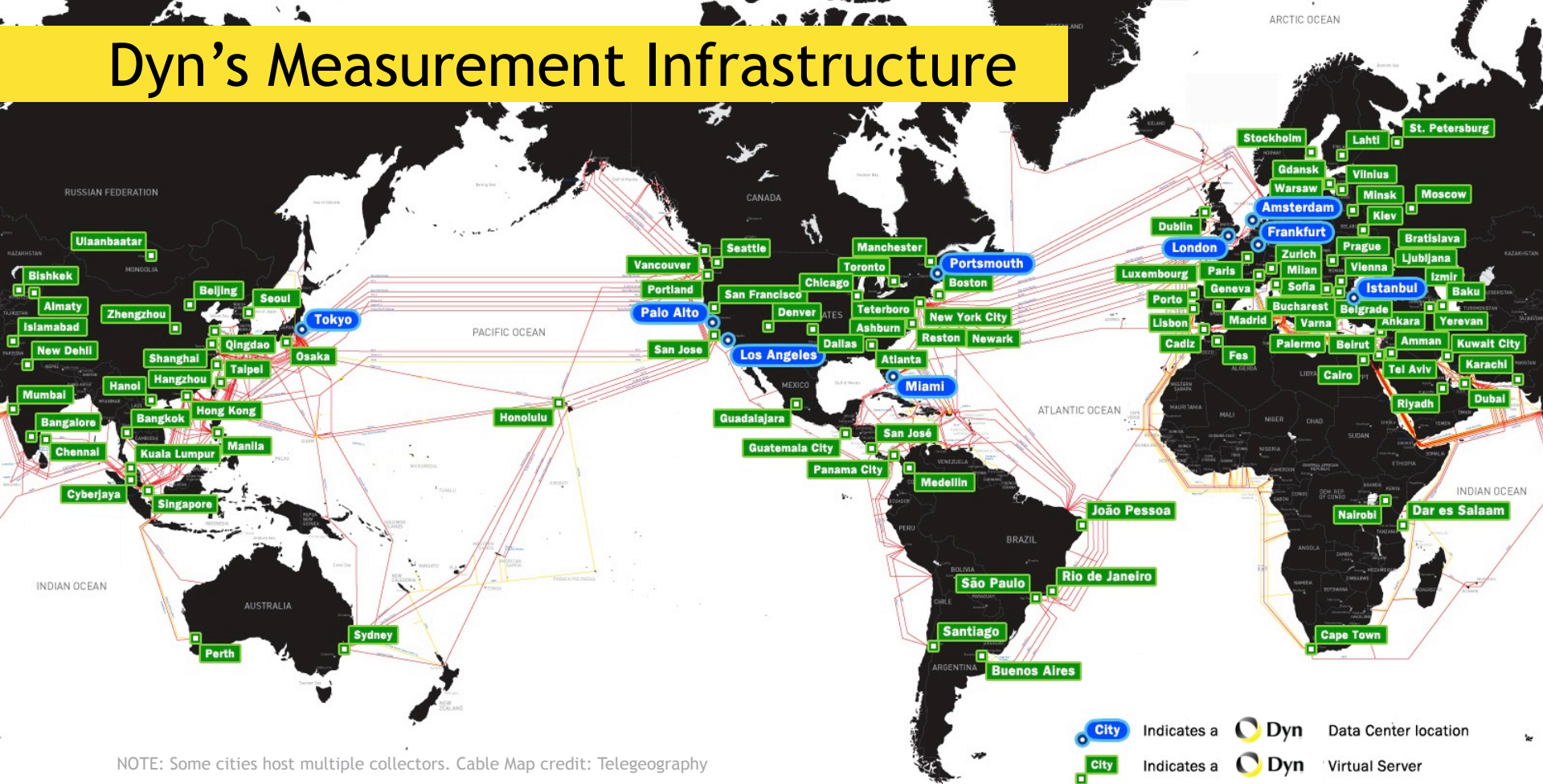


WHY MIGHT

LOCAL HOSTING

MATTER?

Dyn's Measurement Infrastructure



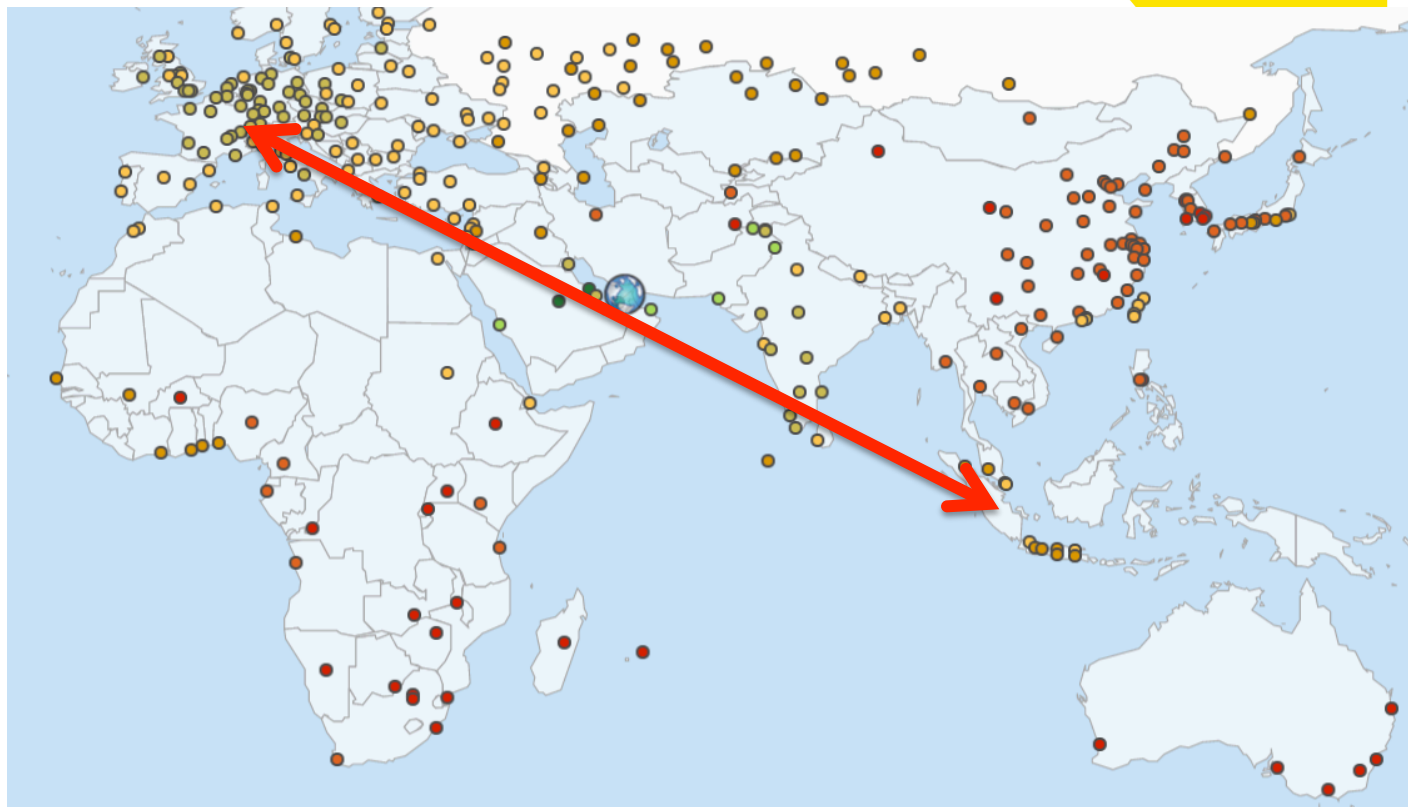
Dubai's Latencies Worldwide

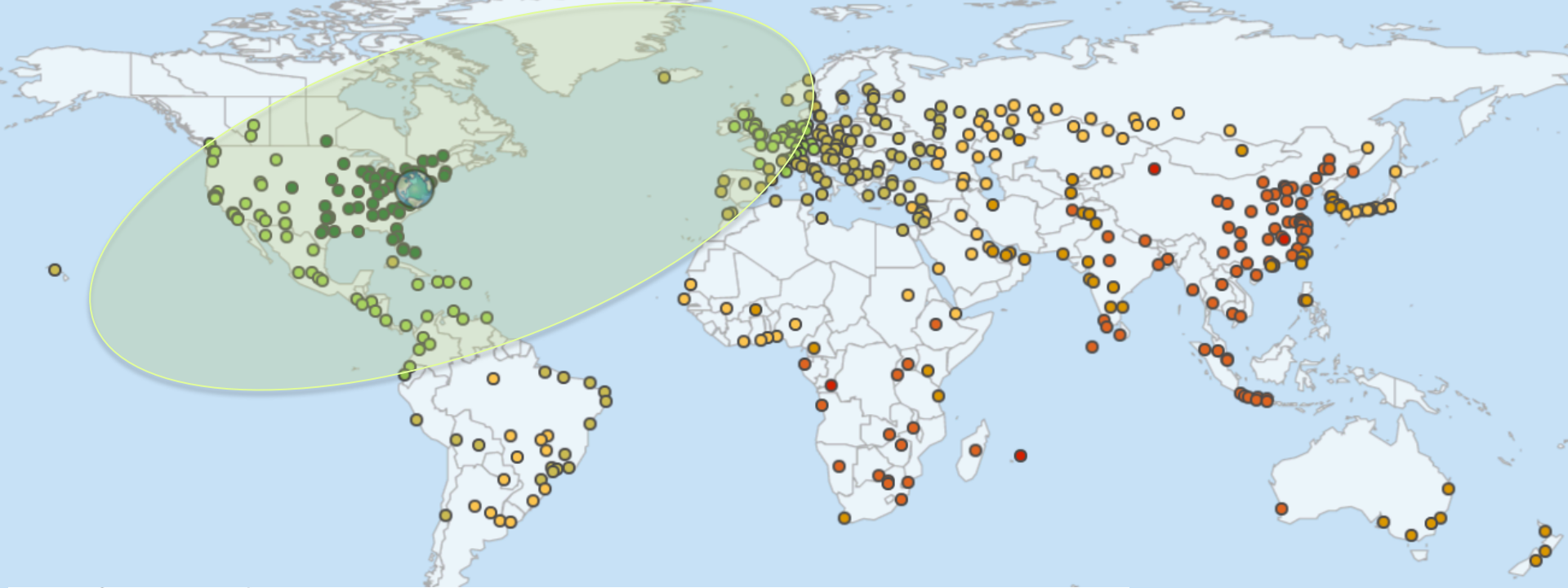
Western
Europe:
100-150ms

Singapore:
150-200ms

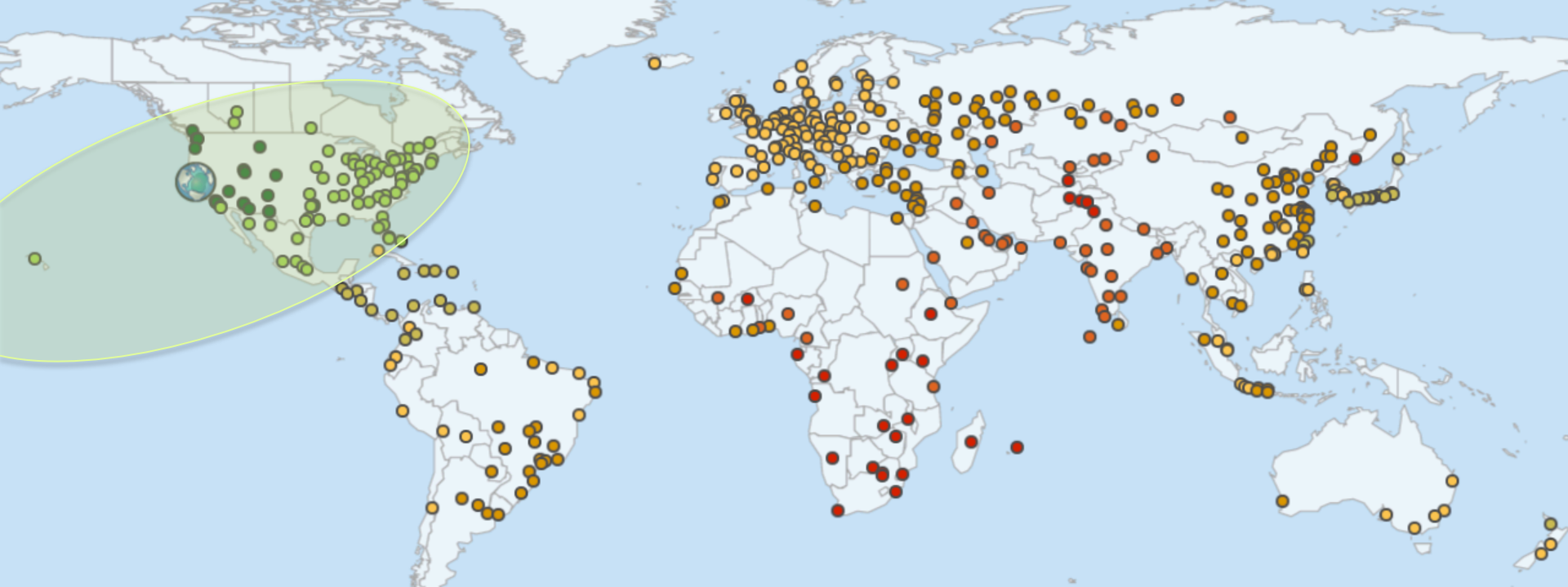
US East:
200-250ms

US West:
250-300ms

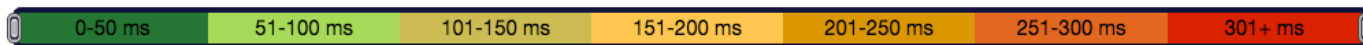
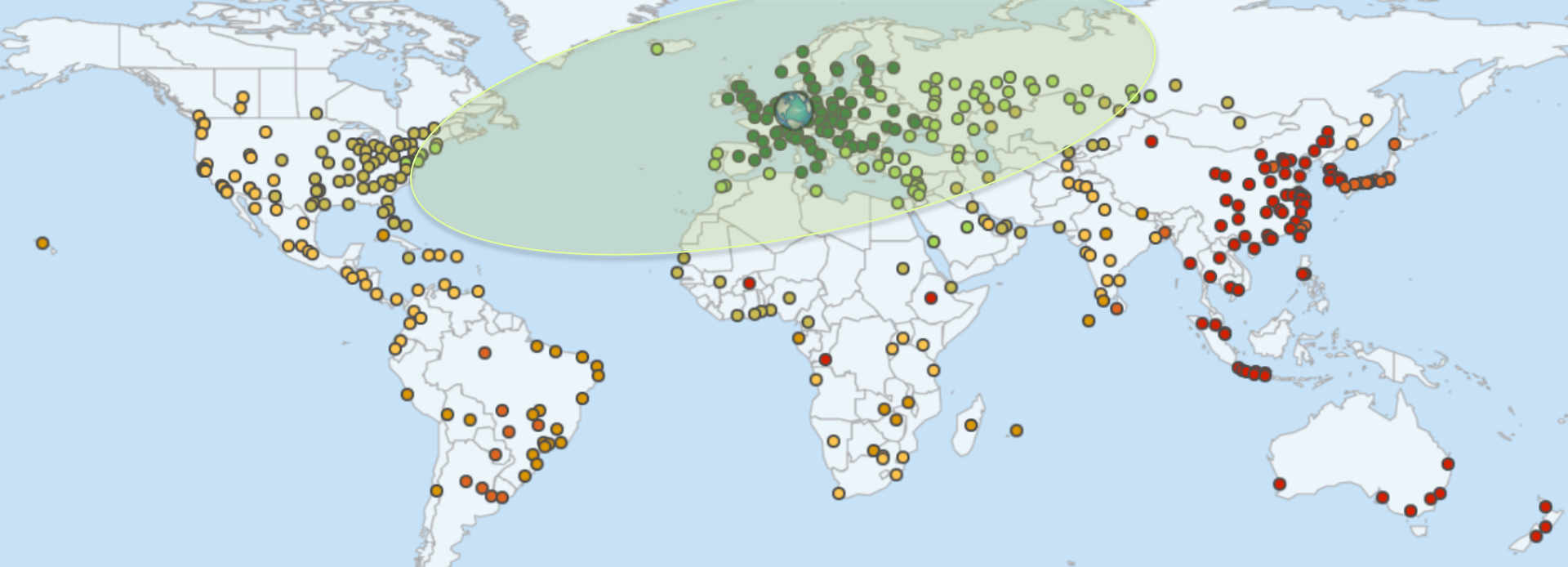




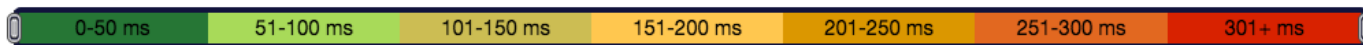
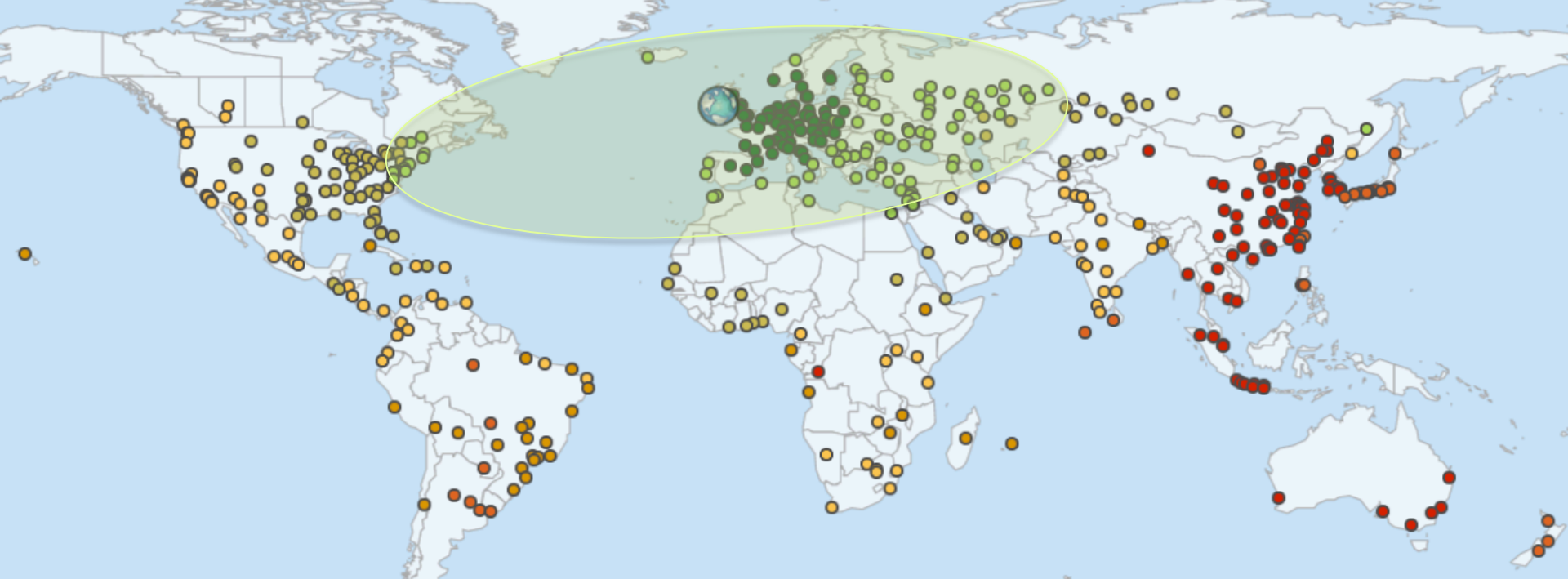
Amazon US-East (Virginia) 100ms footprint



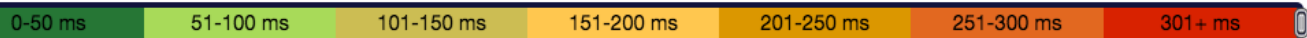
Amazon US-West (SFO) 100ms footprint



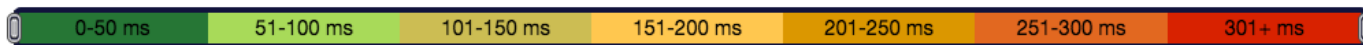
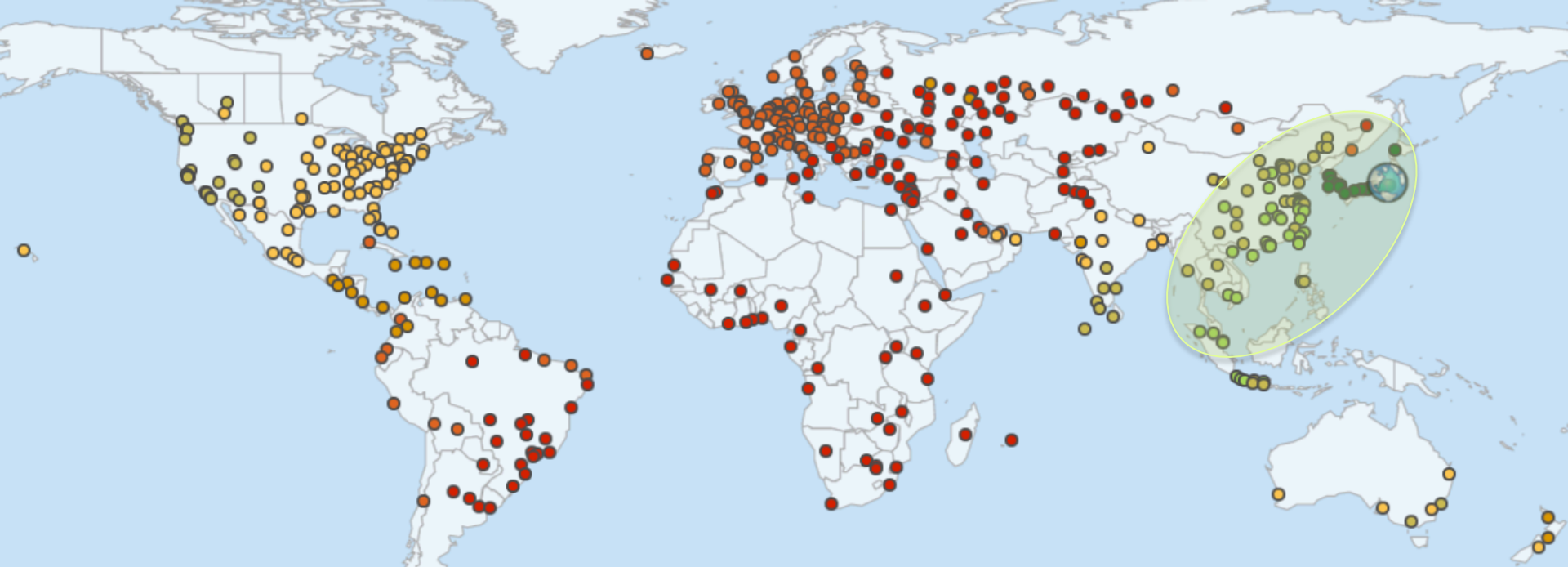
Amazon EU-West (FRA) 100ms footprint



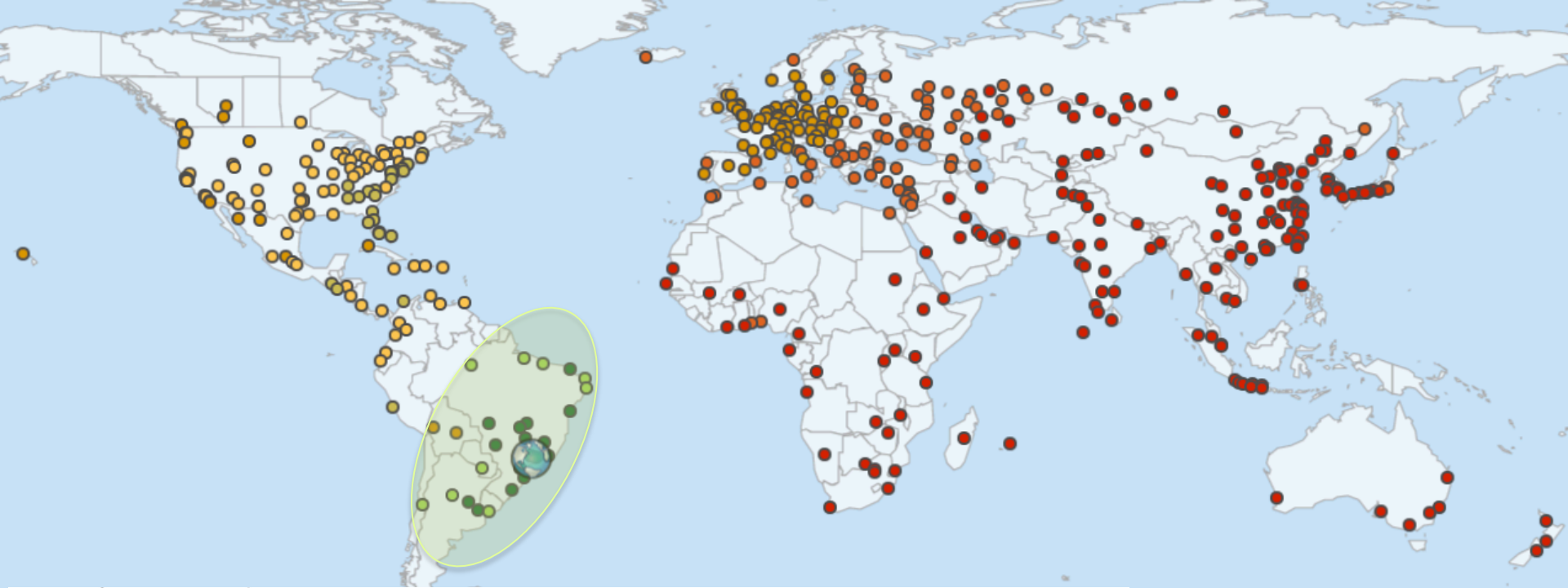
Amazon EU-West (Dublin) 100ms footprint



Amazon APAC-SE-2 (SG) 100ms footprint



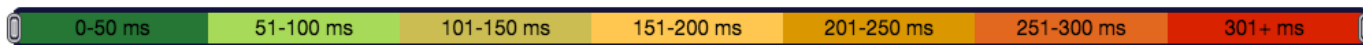
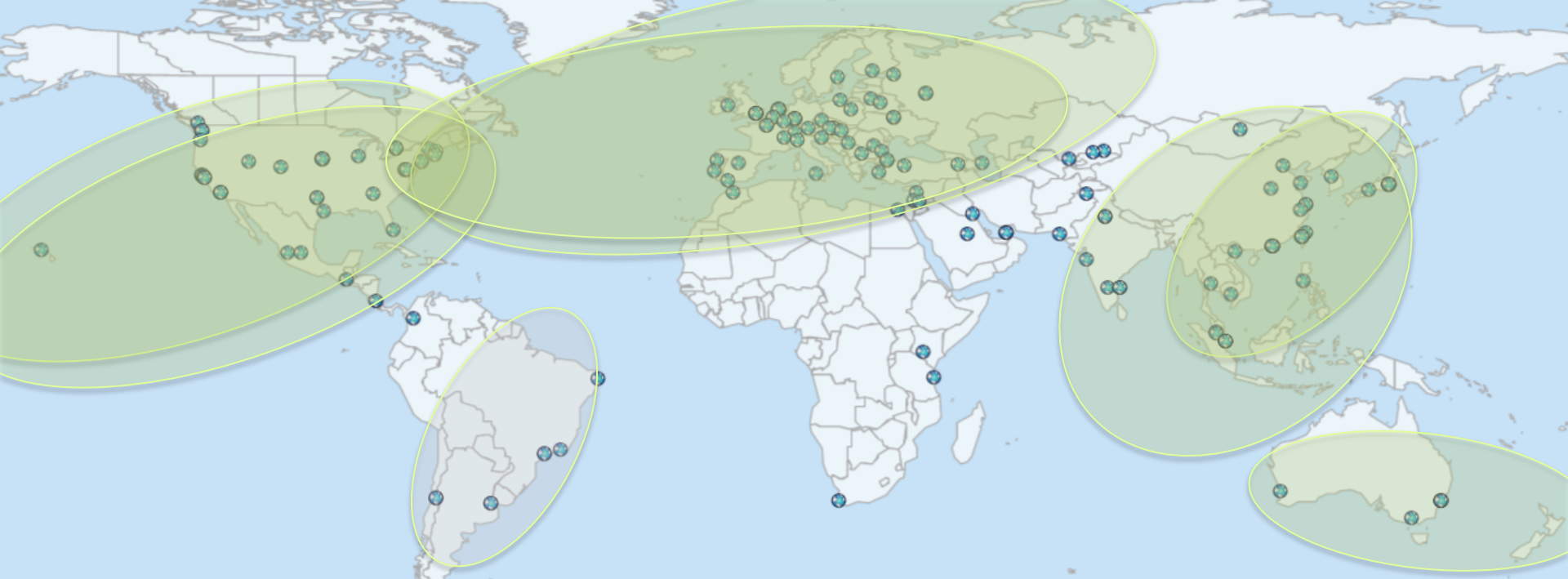
Amazon APAC-NE (TYO) 100ms footprint



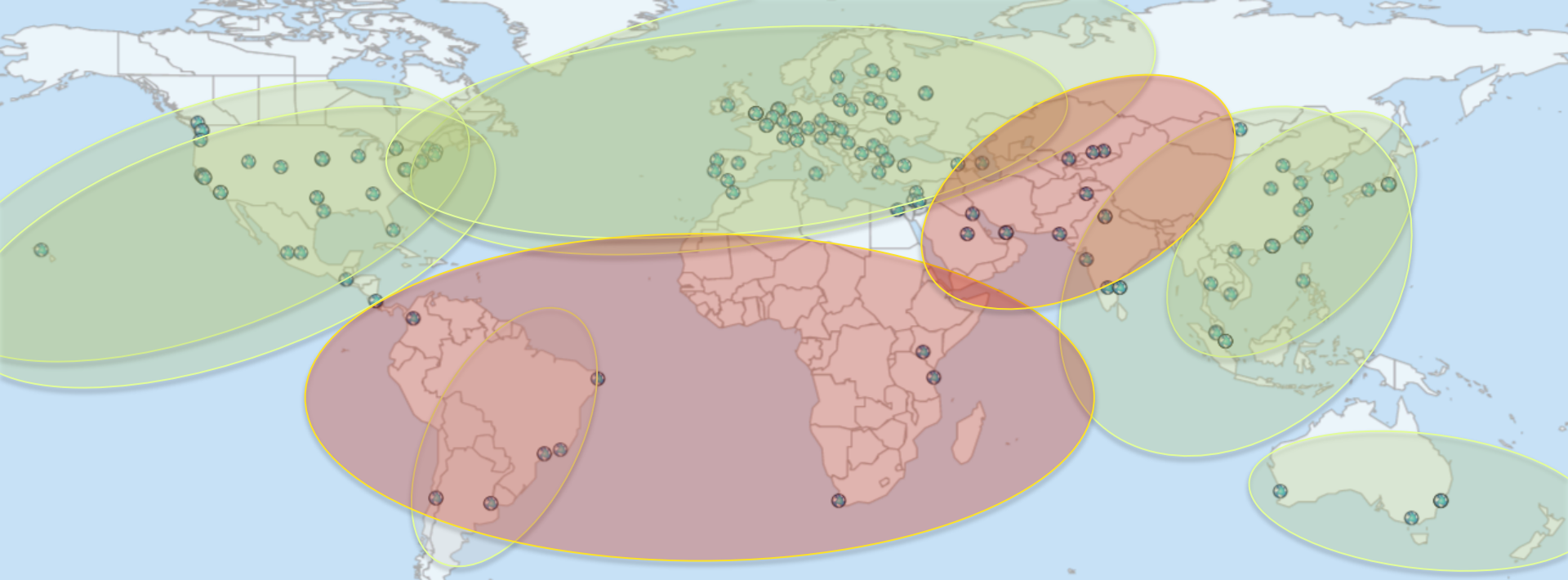
Amazon SA-East (Brazil) 100ms footprint



Amazon APAC-SE-1 (Sydney) 100ms footprint



Overlapping 100ms coverage zones



Consumer Markets with High Growth, Limited Coverage:

South America Subsaharan Africa
Middle East India Central Asia

We Have (Profitable) Work Left To Do

- “Cloud infrastructure” is beginning to deploy closer to underserved consumer markets
- Provider dominance plays a special role here; latency benefits of local hosting may not apply marketwide without strong local peering
- Still not clear who will achieve critical mass as a regional hosting center: Istanbul, Dubai, Tehran, ...? Time will tell!





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