

World Cup 2014 Advisory

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EXECUTIVE SUMMARY

The world's largest sporting event, FIFA's World Cup, is being held in Brazil 12 June 2014 - 13 July 2014. At the 2010 World Cup hosted in South Africa "a total of 3,170,856 spectators attended the 64 matches". FIFA is again distributing a total of over 3,000,000 tickets for the tournament where Brazilian and international visitors will be attending football (soccer) matches in 12 cities across Brazil. Akamai anticipates increased Internet traffic to and from Brazil throughout the tournament.

ANTICIPATED CHANGES IN INTERNET TRAFFIC

The World Cup will generate changes in multiple profiles of Internet usage over the course of the tournament.

Akamai anticipates a surge of interest from overseas spectators researching the 12 venues which will result in an increase to Brazilian travel and tourism sites in general. This traffic will originate from all audiences worldwide which will number in the hundreds of millions. Websites hosted within Brazil may appear slow or unreachable if capacity is reached on international links.

Domestic Internet traffic within Brazil to travel and tourism sites will also increase as both international and domestic ticket holders will consult hotel, dining, and transportation sites as they move from city to city following their teams. This traffic will, at minimum, have spikes of activity especially as the group stage of the tournament ends. At the end of the group stage on 26 June 2014, the remaining teams are seeded to different cities for the later rounds of the tournament. Seedings are unknown until the group stage standings are finalized, so this will generate last-minute booking activity.

International visitors traveling within Brazil will also generate traffic to overseas websites as a part of their day-to-day routines. This includes checking news, on-line banking, and social media sites in their native languages. Some users may also attempt to stream media but may be blocked by geo-restrictions. Many of these websites are likely to be hosted in the visitors' countries of origin which will increase the flow of traffic over international links. Websites not utilizing a CDN with a global footprint will likely suffer from poor performance.

Another potential source of congestion is that due to the sheer popularity of football in all of Latin America (not just Brazil), each country's Internet usage may increase. This may cause congestion at the few international exchange points where national carriers and ISPs exchange traffic with their Brazilian counterparts.

These combined factors of inbound and outbound international traffic and increased domestic usage may result in the congestion of undersea cables and some interconnection points thereby degrading Internet performance. To minimize exposure to congestion and the risk of demand spikes, utilizing a CDN is essential to cache images and pages close to end users' browsers reducing the amount of bandwidth necessary to serve web pages in Brazil. Akamai also has performance solutions to mitigate the effects of Internet congestion for applications which require communication with the origin.

FLASH CROWDS AND HACKTIVISTS

The potential for flash crowds is not restricted to travel or sports related industries during this event. News & media organizations should protect themselves from potential flash crowds in case there is breaking news. Promotions by advertisers (on-line or broadcast media) may also create flash crowds to a specific website sponsoring a contest or selling World Cup memorabilia.

Hacktivism may use the World Cup's high profile to promote a particular opinion or to simply generate media attention. An attack may be as benign as attempting to skew an online poll, but may be as serious as a DDoS attack

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preventing access to a website. At least one group has already generated a list of World Cup sponsors as potential targets, <http://www.en.anonymousbrasil.com/brazil/a-message-from-brazil-to-the-world-world-cup-2014/>.

Another threat may be a revival of protests against FIFA last year. In June 2013 widespread protests were held in multiple cities during FIFA's Confederations Cup, a warm-up event to the World Cup. Demonstrators protested government spending on World Cup preparations while public transportation fares were raised. FIFA made public statements committing to the tournaments amid the protests. During these demonstrations, some activists also called for online demonstrations which usually manifest themselves as defacements and DDoS attacks. Furthermore, public unrest in Brazil continues to make the news.

Hacktivists may also target any company with a significant business presence in Brazil. For example, US-based agriculture firms have been targets of online threats centered around GMO crops. Because the Amazon is often equated with Brazil, protests against petrochemical companies operating in Peruvian forests may emerge as well.

AKAMAI'S ADVANTAGES

Akamai's global footprint where 90% of Internet users are a single network hop away is not the only architectural advantage. Because the tournament will be held not only in the major population centers in the southeast but also in a total of 12 cities throughout Brazil, a geographically diverse footprint within Brazil is essential to serve traffic for travelers as they attend matches in regional cities.

Brazil operates a highly regulated market and building capacity in Brazil requires long term relationships with ISPs and datacenter operators. With over a decade of experience operating in Brazil in a multiple cities, Akamai's footprint in Brazil is unparalleled. This footprint in Brazil is visible on our global map: <http://www.nui.akamai.com/gnet/globe/index.html>

All Akamai customers will benefit from this reach so that their websites can continue to serve flash crowds and roaming users whether they are checking the news or their account balances while planning for more dining and travel in Brazil. Customers utilizing Kona SiteDefender can also benefit from DDoS protection from hackers and flash mobs. In addition, Akamai's website acceleration technologies can lessen the impact of poor international connectivity.

Akamai's threat intelligence team will be monitoring activity during the event.

REFERENCES & RELATED READING

<http://www.copa2014.gov.br/>

<http://www.fifa.com/aboutfifa/worldcup/index.html>

<http://www.fifa.com/worldcup/destination/index.html>

<http://www.fifa.com/confederationscup/index.html>

https://en.wikipedia.org/wiki/2013_FIFA_Confederations_Cup#Protests

<http://www.en.anonymousbrasil.com/brazil/a-message-from-brazil-to-the-world-world-cup-2014/>

<http://operationgreenrights.blogspot.com/>

<http://www.theguardian.com/global-development/2013/dec/12/brazil-gm-terminator-seed-technology-farmers>

Traffic Light Protocol – <http://www.us-cert.gov/tlp>

ABOUT AKAMAI CSIRT

The Akamai Customer Security Incident Response Team (CSIRT) researches attack techniques and tools used to target our customers and develops the appropriate response – protecting customers from a wide variety of attacks ranging from login abuse to scrapers to data breaches to DNS hijacking to distributed denial of service. It's ultimate mission: keep customers safe. As part of that mission, Akamai CSIRT maintains close contact with peer organizations around the world, trains Akamai's PS and CCare to recognize and counter attacks from a wide range of adversaries, and keeps customers informed by issuing advisories, publishing threat intelligence and conducting briefings.

CONTACTS

Existing customers that desire additional information can contact Akamai directly through CCare at 1-877-4-AKATEC (US And Canada) or 617-444-4699 (International), their Engagement Manager, or their account team.

Non-customers can submit inquiries through Akamai's hotline at 1.877.425.2624, the contact form on our website at http://www.akamai.com/html/forms/sales_form.html, the chat function on our website at <http://www.akamai.com/> or on twitter @akamai .

The Akamai Difference

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