

AKAMAI / MO INTERVIEW – 24 MARCH 2009 – PAM DICKINSON AND DAVE BRITTON - MO, UK

Q: Can you just tell me a little bit about what Akamai is and how it actually works?

A (Pam Dickinson): Akamai effectively cache as much as possible of the MO website on their servers. If you didn't have a web caching service then when you get a lot of interest from the general public each individual one will be confined **and** get the same data, so what Akamai does is it caches the web information on their web servers and if someone else requests that page, it too is via the cache on Akamai's servers. To ensure people always get up-to-date information, we set an expiry time (Time To Live – TTL) which means that when the TTL expires, the web information people receive is up-to-date from the MO's page. So Akamai keep delivering the same requested information to people until they come back to the requested page to see if it has changed (when the TTL expires).

Q: What kind of threshold do you have then of web traffic before it might crash, or would it never crash because of this new technology?

A: (Pam Dickinson) They have thousands of servers. We could take about 5m page-hits a day and we went up to about 10 million on that day (normal traffic is 2m) about 5x the traffic. To be honest if we didn't have it, no-one would have been able to access the site as it would have crashed and even if people did get in it would not have been a good service.

Q: Is it on Broadband only?

A: No, basically, they deliver to anybody, so it can be a dial-up modem, broadband, anything.

Q: When you say it can be delivered to anybody, is it just big businesses?

A: No, for anyone who comes into an ISP and comes to collect data can collect data.

Q: What sort of info were people looking for during that period, obviously it was at the time we suffered the largest snowfall for 18 years, was it general forecasting, travel, education?

A: Usually the radar pictures that we have on there to see where the precip is and where it's forecast to be.

Q: So they can see if it's coming their way?

A: (Pam Dickinson) Yes, I presume that's what they do.

Q: Is the radar every 5 minutes or every 30 mins?

A: (Pam Dickinson) Every half an hour

Q: Would that be changed in the future to give people more up-to-date radar info?

A: (Dave Britton) We're always looking for ways in which we can improve our website and we have already recently did a big refresh to parts of the site.

Q: TORRO have been branded by the MO as the experts in tornadic conditions and as you may know we issue forecasts for convective wx and wx conducive to tornado development and I was just wondering whether this would be something that TORRO could collaborate with the MO in their use of the Akamai technology to help raise awareness of atmospheric conditions conducive to tornado development?

A: (Dave Britton) We're always looking for different ways we can communicate severe weather forecasts.

Response Q: (Samantha Hall) Excellent, so this may be something that we may be able to contribute to in the future via your website?

A: (Dave Britton) We've been looking at things such as 'Twitter' and 'Facebook' and also You Tube to communicate severe weather forecasts that don't necessarily rely on our own website because what we

were seeing during the severe wx during February in particular is that some websites went down due to volume of traffic, but ours didn't.

Response: (Samantha Hall) Exactly, I mean we're always wanting to try and raise awareness to our forecasts so people can check the forecasts and plan their days accordingly. As you know, we cannot forecast a time and place for any tornadoes but at least if people were aware of their possibility they would be able to keep their eyes out for brewing thunderstorms which are obviously more dangerous with regards to CG lightning, strong winds and hail.

Q: Does Akamai have facilities to help if the actual ISP went down?

A: (Pam Dickinson) If your line or ISP goes down you have no connection at all.

Q: So they don't have any technology to help in these circumstances – it does rely on the ISP working 100%?

A: (Pam Dickinson) For your connection that goes from the ISP to your computer, yes, but they have auto routing that appears to work but obviously if your line goes down, you have lost your connection.

Q: Does it work constantly or does it work after a peak threshold of traffic increase?

A: (Pam Dickinson) It's all the time

Q: What do you think will be next for technology such as this? Technology is improving all the time, what will we be seeing next in the future for this kind of technology?

A: (Pam Dickinson) Mobile technology and all sorts in the future.

Q: How much investment has there been in this new technology?

A: (Pam Dickinson) The investment we have put in would be par with any investment that we would have had to put in on our internal infrastructures.