

Reaction to “Measuring the Practical Impact of DNSSEC Deployment”

1) Technical details (approach/technique) that you found novel/ Something specific you learned that you didn't know before

They have mentioned an interesting fact that in different browsers, the sequence of loaded resource has different impact to the successful rate. Especially, IE tends to have a higher failure rate for later resources, which possibly means it gives up to load resources when encountering one error.

2) Could I have done this work if I had the idea why or why not?

The authors based their ideas totally on public cloud services such as online ad framework and Amazon EC2 virtual machines. If we have the same idea, we can repeat or re-validate their ideas and conclusions. This is one of the coolest part of this paper.

However, the authors also mentioned that the method that use online ad framework to collect user data has a low completion rate. This should be noticed as a drawback of such method.

3) Is there anything I could do to repeat or validate?

Most of the ideas in this paper can be repeated or revalidated.

4) What is my best idea for follow on work that I could personally do?

One thing I am interested in doing is to explore more possibility of using online ad framework to conduct tests. This will include an analysis to different behaviors under different OS and browser environment, as what the authors have done in this paper of the relationship between loading sequence of resource and the failure rate.

5) What is my best idea for follow on work that I'd like to see the authors do?

The authors seems don't provide the detail of the different badsec test, although I believe they have collected such kind of data. I would like to see more about the different badsec they mentioned in the paper, and explain more detail about the attack scenario related to these cases.

6) Any logistical experimental lessons I learned?

It is a cool and brilliant idea to use online ad system such as Google Ads to conduct research against unspecific real web users. I am deeply impressed by this idea. We can also use similar ideas if we are going to sampling on unspecific user machines.

7) How does this compare to the other papers we read? Most similar? How different? Other comparisons?

Different to the paper we have read before.

8) What is your biggest criticism of the paper?

The distribution of participants rely solely on the online ad framework, which uses some unknown algorithm to choose on which machines the ad is displayed. In the paper we see no assumption or analysis about this distribution. It seems that the authors by default think this distribution is identical. However there's no proof for this assumption. Without a proper analysis of this distribution may cause a bias and skewed result on the final result.