UA Measurement WG Meeting
22 February 2023

Attendees

Nabil Benamar

Arnold Dangizyan

Avetik Yessayan

Dennis Tan

Frank Anati

Gopal Tadepalli

Harsha Wijayawardhana

Jim DeLaHunt

Julien Bernard

Luis Valle Sejas

Yin May Oo

Seda Akbulut

Meeting Agenda:

1. Welcome and Roll Call
2. Guest speaker to present the final report on UA readiness of Identity Platforms
3. M4 Action Item: Whitepaper to persuade the developers that changing from IDNA2003 to IDNA2008 is not a big deal. (See Jim's email: "UASG White Paper to Advocate IDNA 2008")
   https://docs.google.com/document/d/1ZWYqbnZRL9uRPOiaGwUNE8HeSGDayg0UMxlck0PGB3w/edit#heading=h.adf681vtmuse

[Recording](#)

Meeting Notes

Nabil started the meeting with the guest speaker, Avetik's presentation.

UA presentation

Avetik said there are two prepared presentations, one is powerpoint slides and the other is a pdf file. The presentation would be the current work and the test plan, the target identity and SSO platforms, Test architecture, Test flow, Test run,

Deliverables and Implementation Timeline. The technical details will be on the slides - Apache, Concurrent Development of multiple components, Implementation, Development efforts, Recommendations, Test results, Replicating errors, UA readiness measurement, Return back to community. Tools & Resources and development. There are more details in the pdf file.

Jim thanked Avetik and asked what is the breakdown of the percentage of universal acceptance compliance. Avetik used the pdf file to explain the details, and the result was based on 10 tests. According to test results, Auth0 is the best one.

Jim asked two more questions :
- Is it possible to use an international email address as a user identifier?
- Is it possible to use an international email address as a location for second factor authentication?

Avetik answered that the user identifier can be the internationalized email address, however, the second factor authentication might fail.

Dennis Tan posted a question in chat : *Is the Auth0 in the study the same as the one advertised here https://auth0.com/? If so, what is the difference between Okta and Auth0 vis-a-vis the study.*
Avetik answered that those two are totally different platforms. Auth0 was a separate initiative then Okta acquired it. Their maintenance is different and these two are different types of identity platforms that can be used by the community.

Gopal asked why is it focused on Single Sign-on (SSO), Avetik answered it was not always the case of SSO, there is authenticating the user with the two-factor authentication. There is a slide mentioning SSO, Avetik said there were three platform candidates that were integrated with social network platforms and exercised testing with them.

Julien asked about Regex in the Recommendations slide, Avetik advised to see the details in the pdf file, since the Regex expression in the presentation slide was incorrect. There was a Regex that was accepting only Latin letters, and they have been trying to modify it to become compliant to UA readiness. This would be shared to the community. Julien shared that there is a problem with using Regex for validation mainly for the domain part because it is unable to validate the domain part. So, Julien suggested adding a note about Regex may not be sufficient or completely correct if validation is conservative.

Jim asked with a scenario, if someone wants to develop a website or a web application, whether it is feasible to allow users to use internationalized email addresses as identifiers, and to do two-factor authentication with those email addresses. Asking if the infrastructure is ready for this case, Avetik answered that the platform integration is customizable, the only thing is the integration part of one of these platforms should do api integration with this platform, this may take some effort probably. This could be done as a service as a commercial stuff.

Arnold pointed out that on the UA readiness measurement slide, it showed that Auth0 is 100% UA ready, and asked if it included the authentication platform for identity. Another question was for email services, having an exchange server 2019 which is 91% ready, it can be clearly communicated to those persons who asked about the readiness of identity platforms. Jim said, in this case, he could go ahead and make the web application and use internationalized email addresses, however, better be careful to choose Auth0 and not Okta and not OpenIAM, and better be careful to use Exchange Server 2019 as your back end. Jim confirmed if this advice would be good enough with the rest of the working group members. And then, Jim suggested adding this scenario to the conclusion or somewhere in the report, so that this would be a good guide for those who are keen for UA.

Avetik mentioned one constraint that the 100% was based on 22 email addresses and there might be any other addresses which might cause the testing to fail.

Jim said the concept of universal acceptance is like a dark jungle, the goal is to have one narrow path through the jungle which is lit and clear and give people hope that it is possible to get through, and now we are installing the light of the path through the jungle, if using internationalized email address is successful, that would persuade other people to follow.

Julien said he has a list of email addresses used for the testing. He assumed that there are no email addresses which are not compliant with IDNA2008. Adding a note about this would help as well. Julien explained that there could be email addresses with the "Deviation characters" from tr46 and it would be great to test them to make sure the email addresses are IDNA2008 compliant in the next step.

Harsha mentioned about the Microsoft Exchange Server that is 91% compliant to be used as a mail sender for EAIs, Harsha's testing scored lower than that. Harsha asked about the language details for the EAI email addresses and shared the issues with Sinhala language email addresses. Avetik shared that there was a problem with Cyrilic email addresses. Avetik admitted that he was not aware of

IDNA2003 vs IDNA2008 compatibility. Harsha advised adding Sinhala addresses in the next testing rounds. Jim said it would be better to specifically pick the email addresses which illustrate the differences between IDAN2003 and IDNA2008.

Nabil asked about testing on only one email platform according to the report, Avetik said the testing was done on only one of each platform because it was not meant to compare two platforms of the same category. Nabil asked about Arabic script email addresses concerning the mention of RTL, the first email address is a mixture of ASCII and unicode, and the second email address is fully unicode. Arnold answered that any kind of bidirectional email addresses can be marked as RTL, when the mailbox name is in ASCII, the IDN domain in Arabic is in RTL. Nabil suggested mentioning which specific part when it says RTL.

Gopal said in the chat : *<NOTE> I am not a linguist. Neither do I claim high expertise on the Dravidian Languages - Tamil, Telugu, Kannada, Malayalam. All Dravidian languages are written in their own script. <TO BE FORMALLY TESTED> But it is possible to write all Dravidian languages in a single script. In Karnataka, Kannada script is used to write Tulu, Kodava, Badaga, Beary, Sanketi, Konkan and Sanskrit languages. Kannada script is also used to write Telugu and Tamil. - Dr. T V Gopal, Anna University*
Gopal said that the technology is a challenge to identify language mixing.

Jim replied in the chat :
@Dr T V Gopal: I don't see how to use that information in connection with email addresses. Email addresses are merely sequences of characters, with no metadata describing which language those characters represent. This is similar to Latin script, where the language could be French, English, Igbo, etc., correct?

Dennis asked how Auth0 relates to other platforms' authentication against other social media platforms or web services, and what was the landscape of market share. Avetik answered that the market share of Okta is probably the biggest, and the second is Auth0.

Jim thanked Avetik for sharing the information and taking the first step, Nabil added his thank you note as well.

ICANN76 prep week
Seda shared that on Feb 28, 15 UTC, there would be an online community update meeting for ICANN76 preparation week. The content for the presentation could be updated offline.

Nabil asked the meeting participants if there was anything to be added within the five minutes.

The white paper
Seda said the white paper prepared by Jim would be shared at the community update as well.
Jim gave a quick update, he has done the outline and grateful for the comments on the document, since there was no negative feedback or objection on this, he would add full effort in making this into a full paper. the two next steps would be
- Jim would go ahead and write it according to this outline and send it around to be reviewed.
- Jim asked for specific language examples such as Sinhalese, Farsi and other native language speakers.

We can share that the white paper is work in progress at ICANN76.

Regarding the language specific examples, Harsha asked Nabil to make labels using the Zero Width Joiner and Zero Width Non-joiner. Gopal tried to share something about Indic scripts however the connection was interrupted. Gopal will send the examples to the mailing list.

Dennis asked what is the concern with making the labels since these were not supposed to be spelling rules, and the motivation of comparing the difference between IDNA2003 and IDNA2008. Jim answered that for some labels to be human readable in some languages, there could arise the need for these deviation characters. The users would use these characters and software would drop those characters if the software were still in IDNA2003, as a result, the user may get the wrong result. So the argument is to support IDNA2008 which would lead to the correct result. Jim invited more feedback if he presented any misleading point. Harsha also explained that these ZWJ and ZWNJ are required to form language specific labels to be displayed correctly as the native speakers expect them to be. Jim concluded that one point is about sending users to the wrong destination because of the deviation character, and another is to render the labels correctly.

Jim also requested if anyone has found any registry policy or agreement which mentioned the variants to labels with ZWJ/ZWNJ and without ZWJ/ZWNJ, to be shared to the mailing list.

The meeting was concluded and the next meeting would be over a month due to ICANN76 meetings and UA day events.

In the next meeting, we will continue on SOW for which we have done the first paragraph only.

Next meeting: Thursday, [TBD] 2023 at 16:00 UTC

Action items

No.	Action Item	Owner
1	Send the paper of frequency of ZWJ words to the mailing list	Harsha
2	Share examples of Indic language labels	Gopal
3	Share examples of Arabic labels with ZWJ and ZWNJ	Nabil