

UA Measurement WG Meeting

25 August 2022

Attendees

Nabil Benamar	Jim DeLaHunt
Harsha Wijayawardhana	Sushanta Sinha
Carine L. Malor	Sarmad Hussain
Jan Jensen	Seda Akbulut
Oana Bota Achim	Frank Anati
	Joseph A. Abandoh-Sam

Meeting Agenda:

1. Welcome and Roll Call
2. Web Hosting tools testing report - by Nexperteam BV
3. Continue discussion on impact of the use of HTML5 email field
4. Discussion on M4: Characterize how much Android platform limits acceptance of IDNs in web browsing
5. AOB

Meeting Recording: [link](#)

Meeting Notes

Nabil opens the meeting with the Web hosting tool testing report by Oana. Oana shared the assessment results and shared the purpose of the assessment, which is to find out to what extent cPanel, Plesk and ISPConfig offer the capacity for customers to build websites and host emails with Universal Awareness. She shared a high-level test plan and methodology, which were covered in phase one of the project. There were 9 environment configurations used for testing based on configuration of the server. As for executive summary, a number of services are not compliant with UA readiness. There was no quick fix for UTF-8 support. ISPConfig is one open source tool which allows code changes. Allowing native script by the webhost tools opens some room for UTF-8. Oana presented the Overall Test Scenario Status table, which shows how many of the web hosting

tools support UTF-8 and how many steps closer to UA readiness. She also shared another table of Test scenarios and test cases, which showed the steps of tests to pass for each test scenario. If the most basic part of the test scenario fails, the whole system is considered to fail. She mentioned that none of the systems came with -8 ready features, the admin must manually switch it on. Some tools are already embracing UTF-8, however, the important step of converting U-label to A-label is not supported yet. Oana pointed out that many websites currently do not allow UTF-8 login credentials. Bugreports and feature requests were submitted to cPanel and Plesk, and patches are created to allow UTF-8 on ISPConfig. To conclude, there are workarounds but no 100% solution to support IDN and UTF-8. It is uncertain how to embrace universal acceptance with current situations.

More technical details were discussed by Jan Jensen. Based on the three tools (cPanel, Plesk and ISPConfig), Jan explained the different challenges. When it comes to database tools analysis, none of the tools support UTF-8 by default, some are flexible and allow changing in the configuration to do so. Most operating systems allow a wide range of characters as filenames or account names except Windows. Some tools like cPanel and Plesk would be able to support UTF-8 and U-labels but hindered by underlying tools. There is hope that it is possible to make a system UA compliant and experience the technology with native script, however, we need to find the underlying obstacle to make the road forward smoother.

Jim thanked for the report coverage and questioned how to make this situation better through the road forward. *“Would it be necessary to change underlying components, or is it something that can be done through configuration with the web hosting tools?”*

Jan answered with problem types:

1. ISPConfig is an open source tool that allows FTP users to configure UTF-8. and then the FTP client does not understand UTF-8 data.
2. ISPConfig email function uses a PHP filter that allows checking validity of addresses. That filter only allows ASCII email addresses.
3. If the user uses a shell account, it requires additional configurations to create an account which seems like a bad user name to the system.
4. The receiving end of the email delivery process could not receive the message from the UTF-8 account. The email went out, but the process could not deliver the message. The Postfix would allow an email for a UTF8 format. For the local delivery postfix counts on Dovecot. Dovecot accepts

but would not deliver it. The message was discarded because the “from” address part could not be verified correctly as harmless.

Jim and Jan agreed that some problems are easy and quick to be fixed, however, some are complex and require complicated reconfiguration.

Harsha shared his experience of configuring an UA compliant email server. He used Zimbra MTA. Jan answered that Zimbra was outside of the scope of this study.

Harsha said FTP needs configuration changes to work with UTF8. Shells still have some issues.

Jan agreed and recommended using linux and advanced FTP to circumvent some issues. Jan anchorage testing other tools as well.

Sarmad questioned:

- 1) When using FTP, it doesn't work for UTF-8. Which part of work does not work from a UA angle? Where does the FTP process fail?

Jan: The FTP issue started with the software end of our computer. The issue is not within the scope of the report. The system refused to accept any user name (string) which includes UTF-8 characters, whether it is an email address or not.

Sarmad: The username problem is more of a localization issue rather than UA issue.

Jan: The username creation was an out of UA-related issue. The scope of the entire study of the native-script experience (or localization) is broad.

- 2) Dovecot-delivery agent: the report on its email tools UASG030A.
“Dovecot has not implemented any of the EAI extensions in RFCs 6855 and 6856 and failed most of the MDA tests, so it technically does not have even L1 support. Nonetheless, even without the RFC extensions it is in practice an adequate MDA for EAI mail. It properly stores and retrieves EAI mail messages, and since it has IMAP legacy character set support, mail clients can use that to manage UTF-8 folder names and search strings. One limit we found was that its AUTHENTICATE command does not handle UTF-8 usernames or passwords even if the underlying authentication database in use does.”

Jan: We did not visit the previous study on Dovecot for this report. There was a problem tracing the email disappearance.

Sarmad: Dovecot 2.3.13 was used in the previous study.

Jan: We tested with Dovecot 2.3.18. Maybe it is better in the newer version. The newer version may have other changes.

- 3) Which of these web hosting tools is close to the finish line? Which one would be the best one to pick? What would be a gap to fill those?

Jan: First choice would be ISPConfig because it is easily fixable. Plesk has a built-in file manager, it may require the least effort to make it fully UA compliant. The major concern is upgrading the PHP-8 or the latest version.

Nabil questioned :

- 1) Operating Systems are all different in the test cases. You have different Linux distributions. Did all these three were tested on different distributions of operating systems?

Jan: Testing the tools took a broad range of distributions but they needed to be under a certain range of scope which supports PHP. Only Plesk allows Windows, which is why there is only one screenshot of testing the tool on Windows. Almost identical packages were used to perform the tests. All three of these work on Ubuntu or higher Linux systems. And they need Apache as well.

- 2) Collaboration with the ISPConfig Admin and trying to patch it for UA compliant is a good approach, however, just patching is not enough to give 100% solution and ended up not submitting to Github. Nabil would like to know more about cooperating with the ISPConfig team.

Jan: ISPConfig did not support PHP-8. They are willing to work with us.

Jim asked for more input from Oana and Jan in the future meetings.

Seda encouraged all participants to review the report.

Sarmad asked everyone to meet again at the regular meeting and share the feedback with Oana's team.

Oana said the report has included much information worth looking at, such as bug report, and requested feedback from the working group next time.

Jim DeLaHunt to everyone in the chat:

Statement of Work calls for "three web hosting tools will be tested (cPanel, Plesk and ISPConfig). For each web

hosting tool, three popular configurations will be tested using different web servers, mail servers, and databases on different operating systems. At least two different web servers and mail servers will be tested in the three configurations

for each tool and should be chosen based on what is popularly used by the ISPs using the web hosting tool.” i.e. to select OSs as is helpful, not to cover all OSs systematically.

Jim DeLaHunt to everyone in the chat:

@Oana "we would like to have a deadline for feedback" -- this is a good project manager!

Seda shared in chat:

<https://uasg.tech/download/uasg-030a-eai-software-test-results-en/>

Please find the results of the UA Readiness test of webhosting tools here:

<https://drive.google.com/drive/folders/19EquzAGMeDAeVOhdFdiQz8WKO5y-IIkA?usp=sharing>

Next meeting: Thursday 08 September 2022 UTC 1600-1700

Action items

No.	Action Item	Owner
1	Review the Web hosting tool testing report	WG
2	Organize biweekly meetings for Measurement WG	Seda