

# UA EAI Working Group Meeting

## 12 September 2023

### Attendees

Mark Svancarek

Nitin Walia

Abdalmonem Galila

Anil Kumar Jain

Anna Bagadasaryan

Emmanuel Oruk

Harsha Wijayawardhana

Jim DeLaHunt

Arnt Gulbrandsen

Seda Akbulut

Yin May Oo

### Meeting Agenda:

1. Welcome and roll call
2. Draft an [SOW for FY24 Action Item E2.1](#) (Make it easier to experiment with a self-hosted working EAI systems)
3. Clean up the EAI Self Certification [Guide](#)
4. AOB

**Meeting recording:** [Link](#); password #+\$3PHxFP\$

### Meeting Notes

Mark started the meeting reminding the WG about the main items to work on the EAI Self-certification Guide document. Those were resolving all the comments and finalizing the table of the 'Tools' section.

### Clean up the EAI Self Certification Guide

#### Section 10 : Tools

Mark said this 'Tools' section is unusual and the composite requirements are in a different style than other sections. For other components, the test plan was to have separate rows for different UA verbs which are 'send', 'receive', 'store', 'processing', etc. Mark asked if WG should lay out the tests for the 'Tools' section the same as other components.

Tool.1: The description seemed to have too many different items and Mark tried to separate them into different rows for clearer purpose. WG did not decide whether to divide Tool.1 into smaller segments or leave it as it was.

Tool.2: This was left as edited during the last meeting.

Tool.3: Description of Tool.3 was reformatted.

Abdalmonem recalled that Silver means EAI functions are there, however, not by default. Abdalmonem suggested that this test should be a requirement starting from the Silver level. Nitin said Tool.2 was for the local part and the domain name, which is the minimum requirement and it should be for the Silver level.

Tools could be part of an email server or spam-filters, the definition which were for Gold or Platinum may differ a little bit. Abdalmonem said that Gold should support EAI by default without requiring a change in the setting. Abdalmonem thought it might cause confusion, and Leave Tool.3 to be Silver requirement. Mark explained the definition of “Tools” would not include email hosting, and tools refer to address book, calendar and such.

Mark asked if there are any examples of the tool, which processes EAI email addresses in the background but would not do the display of addresses. Jim answered it could be a spam-filter which produces a text file log but would not produce any output display. Arnt said many things can be 8-bit clean for other reasons. Arnt tested an input field for password in RTL text last February.

Mark asked what would be opposite of 8-bit clean, and Arnt answered MIME encoded. Arnt explained that when a byte outside of the mail specification arrived, it would pass along unchanged. For example, one can receive an email with an 8-bit subject, which is not MIME encoded, and would be passed along unchanged if the sender and the receiver would both use unicode. This would be a fairly safe bet these days and a lot of software would work like this.

Nitin said the mailing-list could be one of the examples where the list displays email addresses with local and domain parts as unicode. When a system receives subscriptions with email addresses, this is all it has to display. Mark asked WG’s opinion on this example, and there were no objections.

Mark changed the bullet points, the first bullet says 'Must support Tool.2'. Jim asked why the choice was only UTF-8 and not UTF-16.

Nitin said if the Tool.3 requires Tool.2 to be fulfilled first, the status should be Gold or higher. If we want to keep Tool.3 as Silver, the first bullet is not required. Mark agreed and removed it. Jim edited the rest of the description for Tool.3.

Mark, Abdalmonem, Arnt and Jim discussed what are the differences between UTF-8 and UTF-16 or others. Arnt said UTF-8 is the encoding which has ASCII as a subset, however, that should not apply to the message part of the email. Arnt said things that run on JVM do not support UTF-8, however, in email structures, Java based programs use UTF-8. Mark reviewed the new text of 'Description' for Tool.3. Mark asked the WG if the new text of 'Summary' for Tool.3 made sense. If the incoming text is encoded as UTF-8, processing or storing or displaying must work. Abdalmonem said UTF-8 should be recommended (not a must or should), and Emoji is not recommended for mailbox or domain.

Arnt said he said something wrong previously, UTF-8 is not a 'must' requirement here, it is for supporting unicode and handling emails. What we need to say in Tool.3 is just "unicode". Arnt said if it is to handle legacy emails, it could be unicode. Jim proposed deleting the requirement of UTF-8, and this document is not a right place to promote best practices and standards. Jim suggestion to update the 'Summary' was accepted.

The updated 'Summary': *"Product fully supports (stores, accepts, displays, etc.) all appropriate email structures such as headers, addresses, and subject lines, in Unicode form, in Unicode form."*

The updated 'Description' : *"For clarity, "fully supporting structures in Unicode form" still allows the tool to impose any character restriction defined by applicable RFCs, UASG Best practices documents, etc (e.g. the SSAC Advisory on the Use of Emoji in Domain Names). See References for a list of such documents."*

Mark clarified that supporting unicode comes with no violation of RFCs or best practices as it would be Gold level. Mark asked for fully supporting unicode and still violating RFCs, Jim said it would include any character in unicode.

WG agreed with the updated text, and decided Tool.3 is Silver requirement.

Tool.6: (now Tool.4)

The text in 'Summary' and 'Description' were reviewed as they were.

Tool.7: (now Tool.5)

The text in 'Summary' and 'Description' were reviewed, and Jim suggested that the wording be edited in the latter.

The updated 'Description' : *"Any domain name must be usable (including new gTLDs, brand domain names and long domain names). "*

Tool.8: (now Tool.6)

The text in 'Summary' and 'Description' were reviewed and edited.

The updated 'Summary': *"If the product can be contacted by email, it can be contacted from internationalized email addresses."*

The updated 'Description': *"For example, email to fax, email to SMS, or products which can receive commands via email."*

Tool.9: (now Tool.7)

The text in 'Summary' and 'Description' were reviewed and the latter was edited. Mark said this could be built on top of Tool.9. Mark asked for an example product which hosts mail boxes. Arnt said it could be the printer which accepts emails for printing. Nitin and Mark said that may not be really hosting. Arnt said another example would be Zendesk, which creates one mailbox for each issue created. Mark noted that this is for Platinum Level. Mark also said this is redundant of Tool.8 as well. Jim suggested editing the 'Summary'.

For the 'Description', Jim suggested not mentioning specific product name, and Arnt suggested using the word "issue tracker".

The updated 'Summary': *"If the product hosts email mailboxes, it can host internationalized email addresses."*

The updated 'Description' : *"For example, some issue trackers host an email address for each tracked issue."*

Tool.10: (now Tool.8)

Mark reviewed the 'Summary', and Nitin added a suggestion for 'Description'. Jim said the message from Tool.10 suggested that if the UI does not support the language of the email address (for example, RTL), that is alright, and it would still get a silver. Jim suggested adding a line to say it would be alright for UI to be not localized for RTL scripts.

Abdalmonem said due to the direction differences, RTL email addresses would be displayed as mailbox name on the right and domain name on the left, non-RTL-readers may not be aware of this. Mark said this is a separate issue. Arnt said not all UI environments would render every script correctly. If 'To', 'Cc', or 'Header' fields contain a couple of email addresses, it is possible to construct mix-directions, depending on whether they are first or second in the list.

Mark said this can lead to three issues.

- Does the tool support those scripts
- Mailbox name, Domain name which will have more than one label should be displayed in the correct order according to the Bidi algorithm.
- If the labels are mis-presented, you can process them in coherent way

Arnt said these issues are safely skippable. Mark tried to capture Abdalmonem's comment and added a note for that. Nitin noted that UASG does not recommend mixed-scripts, it is about best practices. Extra sentences were removed.

The updated 'Description' :

*" Any product, which has been adapted to cater to languages that are written from right to left (RTL), correctly presents email addresses written in RTL scripts.*

*It is acceptable for products which are not localized to support languages requiring RTL scripts to be unable to correctly display email addresses in RTL scripts.*

*Note: email addresses containing a mixture of LTR and RTL text are not in the scope of this requirement.”*

Tool.11: (now Tool.9)

The text in ‘Summary’ and ‘Description’ were reviewed as they were.

WG has finished reviewing the section “Email Utilities and Tools”.

The comments on the EAI Self-certification Guide were all cleared.

### **EAI Readiness Levels**

WG reviewed the text in EAI Readiness Table about Silver, Gold, and Platinum levels. Jim suggested some wording changes for the ‘Functionality’ of ‘Platinum’, point no. 6 was changed to:

*“All tools or utilities included with the product or service should be UA-ready and EAI-enabled as well”*

The ‘Functionality’ of ‘Gold’, point no. 5 was edited and the updated text is:

*“Functionality that processes email addresses rather than messages, for example address books, can create and store Unicode email addresses.”*

The ‘Functionality’ of ‘Silver’, point no. 5 was updated to:

- 1. Enables its users to process email messages from EAI mailboxes but does not host such mailboxes*
- 2. Functionality that processes email addresses rather than messages, for example address books, need not create or store Unicode email addresses*

And for the part that explains the support of RFC[5322], the last point was edited to: “Do attempt to change the Unicode normalization of characters in local parts ”

### **Appendix: Self-Certification Process**

A couple of placeholders were deleted, as well the note about outsourcing.

## References and UASG Guidelines

The reference to SAC095 (SSAC Advisory on the Use of Emoji in Domain Names, <https://www.icann.org/en/system/files/files/sac-095-en.pdf>) was added by Jim.

The EAI Self-certification Guide was cleaned up by the WG. Mark thanked everyone in the meeting for working on this.

WG agreed to end the meeting and meet again on 26 September 2023, and meeting time was temporarily shifted to 30 minutes earlier.

**Next meeting:** Tuesday, 26 September 2023 and **14:00** UTC

### Action items:

No.	Action Item	Owner
1	Pass the EAI Self-certificate to be reviewed by respective stakeholders	Yin May, Seda
2	Prepare for the next week UA-EAI meeting	Yin May