



Work Item: Rating email software using EAI Self-Certification Guide (phase 1)

Ver.: 2024-03-21

Purpose

This work will make ratings of market leading email software products or services following the EAI self-certification guide process.

The aim of this work can be divided into three main objectives. The primary goal is to rate and report on the EAI support of three leading email products or services: **Gmail, Microsoft Exchange, and Zoho2** as listed in the [Proposal Submission](#) section, using the [EAI Self-Certification Guide](#). The second goal is to identify problems with the guide. The third one is to report the bugs and issues identified in email products and services to the respective provider.

UASG aims for the users to be able to send and receive emails from and to all valid email addresses, including globally inclusive email addresses (such as EAI), and never have to make a choice between using the service and using their email addresses. They should be able to do both. Opening the email services for all valid email addresses will open the door to removing the conflict between many services and globally inclusive email addresses.

- UA Working Group proposing the work item: UA Measurement WG
- Reference to the Action plan: FY24
- Reference to work item(s): M7

Description of Work

The project will consist of five parts.

1. Make a plan for how to evaluate the designated email products according to the EAI Self Certification Guide. This includes understanding the Guide, and deciding which test methods to use for each test item.
2. Evaluate the designated email products using the EAI Self Certification Guide. (The vendor who is performing self-certification may direct questions about the program to UAProgram@icann.org).
3. Determine the certification level of each designated email product, and report it to UASG by the method described in the Guide.



4. Produce a clear and concise description of each deficiency and prepare the reproduction materials. The preferred format is a simple reproducer, suitable for use in a unit test or bug report. The vendor is not expected to report the bugs to email providers; ICANN may or will do that (and probably enter into a dialog with the relevant producer/maintainer after the conclusion of the work).
5. Report problems with the EAI Self Certification Guide to the Guide support staff as mentioned on <https://uasg.tech/eai-certification/>.

Here are some further details on each of the parts.

The work will evaluate these email products: **Gmail, Microsoft Exchange, and Zoho2**. Microsoft Exchange should be tested using **Outlook on Windows, MacOS**, as well as **Exchange Web Access**. Gmail and Zoho2 should be tested using the web version on a device with keyboard and wide screen, not using a smartphone.

1) Developing a test plan

1. Read and understand the [EAI Self-Certification Guide](#).
2. Direct questions about the guide to UAProgram@icann.org.
3. Make a plan for how to evaluate the designated email products according to the EAI Self Certification Guide.
4. Submit a draft plan to UAProgram@icann.org for review, and consider review comments for including as changes to the plan.
5. Decide which email addresses to be used as [test cases](#)* (including domain names with new TLDs, long TLDs, IDNs, and email addresses with Unicode@IDN and Unicode@ASCII-domain-name).
6. Adapt existing test harness code (<https://github.com/jrlevine/eaitesttools>), or write new code, as needed.

*When choosing addresses to use as test cases, follow the requirements of the Guide, and use a variety of widely-used scripts and languages. Example test domain names and email addresses in various scripts are included in [UASG004](#) (and the associated [data file](#)). If the Guide is not clear enough on what kind of addresses to use as test cases, report this as a defect in the Guide.

2) Conduct the certification testing

1. Perform the certification testing, according to the test plan mentioned above.
2. For each product evaluated, fill out the EAI selfcert [score generator](#).



3) Reporting the certification level

1. Determine the certification level using the self-certification guide, and report the certification level which it shows.
2. Evaluate whether the certification level from the [score generator](#) fairly reflects the product's EAI support. If it does not, report that as a problem with the guide.
3. Have the vendor write a short description of the EAI support suitable as a product review.

4) Reporting bugs about email providers

The vendor will report to UASG any bugs and fixes needed to support globally inclusive email addresses and to receive a higher certification. ICANN org will report the bugs to email providers and follow up on responses. However, this will take a longer time than the contract period.

5) Report problems with self-certification guide

The self certification guide is version 1 and has not been used often. There are possibly some weak points to be improved. The vendor will report the weak points as they are discovered to UAProgram@icann.org. The final report shall also summarize the weak points discovered in the guide.

Deliverables

Based on the work summarized above, the contractor will provide the following deliverables:

1. Draft evaluation plan and detailed test methods for testing the designated email products.
2. Final evaluation plan and test methods for testing the designated email products incorporating community review.
3. Detailed evaluation report for each product tested, including the following
 - a. email product versions tested,
 - b. certification level for each product, and
 - c. notes on testing procedure with sufficient detail to respond to challenges of test results.
4. Draft report on email software rating, including the following
 - a. Executive summary.
 - b. Email product versions tested, their configurations and components tested.
 - c. Scope of UA testing and summary of test cases.



- d. Summary of the methodology used for testing.
 - e. Test results and certification level for each product.
 - f. UA readiness of each component, covering Unicode processing, IDNs and EAI support, as listed above.
 - g. Bugs and fixes needed to support globally inclusive email addresses and to receive a higher certification.
 - h. Problems with the EAI Self Certification Guide.
 - i. Recommendations
 - i. for email (and system) administrators to select email products and configurations.
 - ii. for consumers to select UA-ready email products.
 - iii. for EAI WG to address problems with the EAI Self Certification Guide.
 - j. Conclusions.
5. Final report integrating the community input on the draft report.
 6. Presentation (for use as training material) (using UASG PowerPoint template provided) covering the contents of the report, with explanation of testing and observations. In developing the training material consider the following:
 - a. Purpose: Provide a high-level reference of the test plan, methodology, process, results and observations.
 - b. Target audience: Technical manager (i.e. high level audience). Knowledgeable about Identity Platforms.
 - c. Length: The material should be constrained to no longer than 45 minutes, measured by the time one person (within the target audience) would reasonably be expected to need to review the material at his/her own pace

Timeline

- Tentative start date: Date of signing of the contract.
- Tentative end date: One month of the contract start date.

Conflict of Interest

To help avoid any perceived or actual conflict of interest (COI), UASG leaders, UASG Ambassadors, members holding working group's leadership positions in the UASG, and any organization(s) affiliated with individuals in these UASG roles, are prohibited from participating in this SOW. In addition, ICANN org COI applies.

Proposal Submission

The proposal should include the expertise of the organization with evaluating the email programs (with justification), a high-level test plan (based on use cases) which demonstrates the expertise available and understanding of the UA related issues.

The proposal will specify these email products: **Gmail, Microsoft Exchange, and Zoho2** (to



Universal Acceptance

be tested using the web version on a device with keyboard and wide screen, not using a smartphone). The vendor will also include **Outlook on Windows, MacOS, as well as Exchange Web Access** in the proposal.

The proposal should be submitted to: UAProgram@icann.org before the submission due date.

References

UA Readiness Framework report ([UASG026](#))

Test domains and email addresses in various scripts [UASG004 \(data file\)](#)

EAI Software Test Results [UASG030A](#)

To refer to previous documents, see document inventory:

<https://uasg.tech/wp-content/uploads/documents/UASG000-en-digital.pdf>