

UA EAI Working Group Meeting

15 August 2023

Attendees

Mark Svancarek

Abdalmonem Galila

Nitin Walia

Athanase Bahizire

Emmanuel Oruk

Enerst Mafuta Katoka

Harsha Wijayawardhana

Jim DeLaHunt

John Levine

Kalpesh Chaudhari

Kunle Olorundare

Lavish Mawuena Mensah

Prof Ibrahim Tchakala

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 w6e1u?DNhB

Meeting Notes

Discussion on SOW for Self-Hosted Working EAI Systems

Mark leads the meeting with discussion of drafting the SOW.

Mark discussed the comments on the SOW document, commented by ICANN staff, Seda on open ended bids. Mark explained that one of WG's goals on this task was to have more than one solution, when there are multiple solutions, the vendor would be paid based on the number of solutions.

Seda suggested specifying what kind of solutions would be prioritized, and the vendor proposed solutions should be comparable for fair competition. The proposals would be evaluated based on how much of the requirements from the SOW are met.

Mark said there is more than one way to complete the solutions. If vendor-1 offers solutions A, B, and C, and vendor-2 offers solutions A, B, and F, the decision must be between C and F (assuming the cost is the same). Mark asked, in the past, for this kind of decision, would UASG or WG make a choice or how was it solved.

Mark also asked what structure of SOW would allow flexibility for WG to choose. Currently, the requirement says the solutions should pass at least the requirement of Gold-Level. Mark shared his opinion that when more than one solution is possible at the moment, focusing on meeting the certain levels of self-certification guide requirements should be enough.

Seda said the main suggestion would be having a list of solutions for the vendors to pick and choose, for example - pick any 3 out of 5. This would still allow some flexibility. Mark said WG has some participants who have made similar solutions for EAI, so he asked for their opinion.

Abdalmonem shared that for their governmental system, all components were open-source and there was no cost. For a fair system, open-source and free softwares would be alright, however, it is good to have some accountability management cost for data protection from governmental perspective. The solutions are for everyone to pick their own choice of components to build its own EAI environment for testing and for production. Those different virtual machines or virtual boxes also need to have a way to be made consistent as the main components.

John shared that he sympathized with the ICANN staff for having concerns of basic evaluations, he understood that this is easy to over specify and demand to the point that all bids are the same and none of them are really good. At one end, the bid could be like giving a choice of some clouds to log in and a set of instructions to run a few command lines. On the other hand, somebody could deliver like 3 preconfigured virtual machines, just starting them and typing in the domain would allow the user to have a running system. It would be hard to tell which solution one would prefer, however, both sides could be plausible bids. He suggested backing off a little and saying this is the Gold-Level to meet, with different places to run it and different choices of criteria with a balance of flexibility.

Nitin said there are 2 sets of users as Abdalmonem mentioned, there could be governmental users who would not feel like putting data on cloud and would like to set up their own deployment. They must have their own reason not to move out of their own infrastructure to move to the clouds. There would also be various users who would be holding IDN domain names and thinking of hosting their systems on the cloud. Nitin said this is requesting the vendor to collect and try out the solutions of various email services providers. There are cloud service providers with free trials for EAI platforms. First, the vendor would test those against EAI self-certification guide, second would be making an available-to-download package and letting the users deploy their system. The solutions would be a combination of different email components, they would be put together in a package as a complete seamless deployment of EAI testing environment on their own cloud platforms or on their own servers. Therefore, there must be more than one solution for various needs.

Mark said the challenge is different solutions for different types of users, and hopeful that one vendor would be able to provide each type of solution. Mark asked if it would be possible to divide the SOW and budget to fit for two basic needs. The general concern is that there are many components that could be combined into dozens of solution sets.

Seda said the requirement for a variety of solutions is understandable, however, the scope could be narrowed down to a few types, like cloud-based or on premises, and limited to using open-source softwares and components.

Mark recognized the two major axes: cloud-based and on premises, however, other than that, the challenge would be to determine how much or how specific without removing bigger flexibility. Mark promised WG would do their best to keep the options comparable among the vendors.

Nitin said quoting John Levine and referring to the UASG 030A document, various components would be tested for L1 and L2 levels. There already is a list of tools and service providers for vendors to consider.

Abdalmonem said for users who would like to run their EAI environment, there are leading tech companies which would allow users to have free accounts. Abdalmonem shared his thoughts that this might be a good idea as well to have commercial software options and do not want to limit only to the open-source.

Mark said this is also another challenge as there are a few commercial providers who could enable this, however, it is difficult for WG to select any of them because ICANN policy or UASG could be challenged by anyone who thinks commercial profit is given to a profit company. Mark said their opinions are heard.

SOW, Structure of Bid:

Mark thanked Harsha for providing the input offline. Harsha explained that the solution is based on free and open-source software. Harsha said one is for the container and one is for the cloud based. Harsha asked if one can have a free and open cloud-based and trial email address, or else, having a container based system would be another solution. Mark said it would depend on the cloud provider. If it is not free, it should be contracting with the cloud provider and that would be outside of the scope of this SOW. Both cases require the user to have some level of knowledge, especially operating the server on premise would require some level of expertise.

Mark asked the WG whether to ask for both types of solutions or either one. Harsha said two SOWs for separate solutions would be better. Nitin said two SOWs and two contracts would be a hassle. Mark asked if one SOW for two solutions would be alright. Jim said one SOW would be alright for both, although more solutions would be better, should go for one solution than zero solution.

John said technically it is not hard to come up with both solutions for one SOW if Docker packaging could be used for packaging the modules which could be run on either cloud or physical server. This is reasonable if they understand the problem.

Harsha asked if the Docker or the container should be a specific type. John explained that Docker provides a virtual Linux machine. Since it is open-source based, John did not see any problem, same goes to Kubernetes. Basically, Docker is the way to start one virtual machine and Kubernetes is a coordination of them.

Mark asked what would be a competitor to the Docker solution. John answered one can come up with a preconfigured virtual machine such as VMware, or Digital Ocean. Jim said Squint for installing software on Windows or Linux would be a competitor for Docker. It is just a base with something like Docker with more convenient installation, so the software can fit on top of any operating system. John confirmed that it works on Mac and Linux.

Harsha asked John's opinion on Podman, which is an alternative to Docker.

Abdalmonem said there are many competitors out there as AWS is also there.

Mark started editing the first paragraph of the Structure of Bid section and Jim helped him.

Mark added the attributes in the document and discussed:

1. Environment:
 - a. Local machine or Cloud service
2. Which OS:
 - a. not specified
3. Open-source components:
 - a. required
4. type of containers:
 - a. not specified but must run in both environments
 - b. management SW must run in both environments

Nitin expressed two concerns: The first question is what the SOW is actually asking for, are we looking for an email service provider to provide a solution, or a data collector to collect data from those email service providers. Second question is why asking for a virtual machine environment. He asked if the service provider needed to host the solution for users. Nitin said he could not support such a setup because of the policy.

Mark tried to clear the potential confusion, saying that the idea is creating a binary, or sharing script and recipe for building their own binary. WG would prefer the binary to the script and recipe of it. For the second question, regarding the hosting, the person who would win the bid (calling service provider would imply hosting), will have tested in some sort of environment and pass the self-certification, but that should not be the only environment it runs in ideally.

They do not have to offer the hosting solution, and if you would use your own cloud environment, you have to pay your own subscription.

Nitin thought that when the vendor has to test the environment against the self-certification guide, the OEM or service provider has to provide the solution to do the scoring first, or would it be self-scoring. Mark said supposing someone won the bid, that person would be called bidder, would build a solution locally on premise, and then on cloud. The presumption that it works on different cloud environments is not an actual requirement because that would be an infinite possibility. When we say service provider, that would be the cloud service provider which would be different from the bidder. When we talk about the bidder, that would be the solution provider we are paying for. Nitin said the bidder would be the solution provider and tester of the self-certification solution. Nitin thought there was some confusion, but Mark disagreed and would discuss later.

Jim said he added some suggestions in the chat for 'Structure of Bid'.

In chat:

Example: "We welcome proposed solutions of the following kinds:

- 1. Services hosted by third-party vendors which the user registers for and configures, e.g. a webmail provider. The solution identifies the service and describes how to configure it.*

- 2. Software packaged as Pass containers (e.g. Docker). The solution includes the container, and describes how to install it on the platform.*

- 3. Packaged software to be installed on a conventional operating system, e.g. Linux, Windows, or MacOS. This conventional operating system may be hosted on physical or virtual machines.*

Jim wished to be clear about the different kinds of services being discussed. Solutions are not expected to include hosting the software. And how easy would the solution be for the user.

More messages from Jim in chat (part-1):

In each case, the solution also describes how to configure it for the user's EAI domain name and EAI local parts."

- *(Direct reply by Jim)*

I do not understand why MarkSv suggests rejecting solutions of the form, "Services hosted by third-party vendors". I think we should include them. I understand that we have discussed this. I think we need to put our conclusion into writing in the SOW, to make it clear for bidders and us alike.

Suggest, "Solutions are not expected to include either the vendor or UASG or ICANN hosting the software. The customer doing the evaluation will be responsible for procuring hosting or registering for the service."

Suggest restating the purpose of the SOW in the context of explaining how UASG will evaluate bids.

Mark feedback on Jim's points that we should exclude the proprietary email service providers. Once all the other parts are defined, it would be revisited and discussed. And also, the third point is hard to be measured. Jim agreed with Mark but also said that this is the ultimate goal.

More messages from Jim in chat (part-2):

Why should this SOW pay for the vendor to perform self-certification on a provider's solution? Because at this moment, very few providers have self-certified their own solution. We don't want to limit the SOW's vendor to these very few solutions.

- *(Direct reply by Jim)*

However, if the vendor picks a solution which the provider has already self-certified, then the vendor may rely on the vendor's self-certification, and not re-do it.

Maybe do not use "Java" as an example of "write once, run everywhere". I hear many people saying that the reality of Java does not live up to this promise.

Abdalmonem said Cocoa has a lot of modules, and it could run all these modules in one package. Abdalmonem suggested having one entirely composed EAI package that would work for all as one solution, so that it could be installed on windows or on any Kernel of Linux, and then publish it at the UASG website. It would be an easy solution for administrators. Mark thanked Abdalmonem for input and he also said that could be a successful solution. One package which can be configured to run everywhere easily would be ideal.

Nitin said in chat:

Still the purpose of SOW is not much clear.

The ask from vendor must be clear.

Mark concluded the meeting saying we made an inch of progress today. Mark requested the chat transcript as it includes suggestions from the WG members. Mark said he would not be able to meet next week. The meeting schedule to be agreed offline.

Next meeting: Tuesday, 29 August 2023 and 14:30 UTC

Action items:

No.	Action Item	Owner
1	Send chat transcript to Mark	Yin May
2	Confirm next meeting and send out invitation	Yin May