ABU DHABI – ICANN GDD: Registrar's Data Escrow Agent Reporting Wednesday, November 1, 2017 – 17:00 to 18:15 GST ICANN60 | Abu Dhabi, United Arab Emirates

- UNKNOWN SPEAKER: File in around the table and we'll pick this up online. Yeah, happy to. Bye-bye. [AUDIO BREAK]
- UNKNOWN SPEAKER: November 1, 2017. ICANN GDD Registrar's Data Escrow Agent Reporting, in Capital Suite 14. Starting time 17:00.
- EDUARDO ALVAREZ: Hello, everyone. We're going to start in a few more minutes. We're just going to set up the presentation and we'll start shortly. For the people sitting in the back, feel free to join us at the table, there's plenty of space. [AUDIO BREAK]

Okay. I guess we can start. Hello and good afternoon, everyone. My name is Eduardo Alvarez from ICANN org. We're going to be discussing Registrar Data Escrow Agent Reporting. So, let's start.

This is what we're going to briefly discuss during this session. We're going to start doing the motivation of what is it that causes this kinds of efforts that we're going to propose here.

Note: The following is the output resulting from transcribing an audio file into a word/text document. Although the transcription is largely accurate, in some cases may be incomplete or inaccurate due to inaudible passages and grammatical corrections. It is posted as an aid to the original audio file, but should not be treated as an authoritative record. We're going to speak a little bit about Registry Data Escrow which is similar to what the registrars do. Then we're going to go a little bit over the proposed functionality, the benefits that we think this will bring, some of the requirements that this will need to be implemented, and then just finish with some discussion hopefully.

Some of the issues with capturing the current Registrar Data Escrow Reporting, and this has also been communicated by the Registrar Stakeholder Group to ICANN, are captured here. Some of the common concerns from registrar data escrow agents and the overall interactions with registrar data escrow agents and ICANN is mostly communication about the issues, how these issues are being tracked with the data escrow notifications related to the deposit that the registrars make.

Also, there's usually a lack of clarity when there's issues with the data escrow deposits being made. Sometimes registrars want to know what is wrong with their deposits when the data escrow agents tell them that it's not a valid deposit, and it's not easy for them to get this information based on what we've heard. They also have expressed concerns with accountability whenever there is data escrow reporting issues, false positives or a lack of reporting all together, and also about having a low visibility of the data escrow reporting status that sometimes registrars are



not aware that they need to do some remediation only until they get some compliance notice, which is sometimes not the best way to go.

As I mentioned before, to try to start on what is it that we are proposing, I'd like to take a look into the Registry Data Escrow Model and ICANN'S RRI. So, registries right now have a similar data escrow model in the sense that they are also required to provide data escrow -- their data escrow agents need to provide ICANN with daily notifications of the data escrow deposits made, as well as registries also provide ICANN some notification for each of the deposits that they make.

These notifications are automated, which would seem, in our eyes, kind of like the tool that has facilitated this process. It also means that the contents of these notifications are standard, and this also allows registries to monitor the data escrow notifications through ICANN's RRI. So we're thinking that reusing this specific model or approach as well as defining specifications would also be a good idea to implement.

So, what is RRI. Registries are very familiar with this, but registrars may not. We call it ICANN's Registration Reporting Interfaces or previously known as registry report interface, but basically, RRI is an API, a RESTful API. It uses HTTP Basic Authentication and it's used to receive the Registry Data Escrow



notifications, but by the escrow agents and the registries, as well as the registry monthly reporting. If anyone is interested in knowing more, the specifications for the interfaces is public in the ITF as an internet draft and the link is available in the slide.

What we're proposing here, basically, is to extend the functionality in the existing RRI that's used by registries and data escrow agents, to support the use of it by registrars and the registrar data escrow agents which may be a different group of entities. Of course, for registrars, this could be optional because this is not included in their accreditation agreement.

With this new functionality, what we plan to do is to allow registrars to monitor their own status and the notifications that ICANN receives from Data Escrow agents. This is kind of like an overview of the data escrow process. We basically start with the registrar creating their data escrow deposits, submitting it to the Data Escrow agent, which in turn will validate the contents of these and as indicated in the data escrow specifications, work with the registrar to address in case there are any problems found with the contents or the files themselves.

Then, as a result, the data escrow agents will then generate a notification basically just to inform ICANN that there was a data escrow deposit made and that it has been verified. Or, if there was a missed deposit, they will also have to inform ICANN as



stated in the registrar escrow specifications. They will also have to inform ICANN if a scheduled deposit was missed.

What would these notifications include based on what we're proposing? This is also again very similar to what we've seen works in the registry space. It would basically just have basic information of the data escrow deposit, the date that the deposits corresponds to, the date the DEA receives the deposit, the date that the verification was completed.

Also, for tracking purposes of the deposits schedule, the date of the last successful full deposit received by that specific registrar, as well as the domain counts that are included in the data escrow deposit, so basically, no information about the domain names, just basic statistics of the deposit. We're also proposing that since there is this verification process required when receiving that escrow deposit, to include the result of the verification and especially the causes of failure if the verification is not successful.

Now, going a little bit further into this verification process for those escrow deposits. We're not proposing to do any new verification process, we're just asking, or providing a way for those escrow agents to inform the results of their current verification of the deposit to be compiled with the existing data



escrow specification which is the original data escrow specification that is available in the link that is in the slide.

As a result of this verification, we would expect the escrow agents to indicate what are the causes of this verification to fail. I guess in summary, we have these categories that are shown in the slide. We could have like errors related to file processing, the verification of the file contents with regard to the hash that's required as part of the deposits, format of the contents in accordance to the specifications, syntax of the data that is included in the deposit and of course, making sure that all of the required data is also included.

To kind of like provide a little bit more insight here, we have some examples of the verification errors that we proposed that can be used. This is detailed in the specification that we want to publish. As you can see, it's just generic errors that fall into the categories that I've talked about, errors in content, errors in the format, some business rule logic, for example, related to the schedule. That's basically what we have here.

In addition to the data escrow agent notifications, we're also proposing to have these optional reporting by registrars themselves related to the data escrow deposits. Now, this is not required. This is not a contractual obligation, but more of an optional thing that they can do in order to use RRI themselves.



They could be able, and this is also to emulate the behavior that we have for registries, just to meet the notifications of what they prepared and submitted to that escrow agent which would allow ICANN also to verify the identifications that we received from data escrow agents with the information that we received from the registrars. Submitting these notifications will also allow, by using RRI, the registrars to have this ability of their status with ICANN related to the notifications that we've received from the data escrow agents.

To expand a little bit on that last topic, what we proposed to enable registrars to do using RRI is to monitor if there is any issues in their reporting, based on the notifications that we receive from the data escrow agents. We planned for this to be something that can be easily automatable. The information that we plan to expose to RRI would follow a JSON format which is machine readable, but also it's easy for a person to read if one decides to use it that way.

If we look at the next slide, I think we'll gain a little bit of a better understanding. This is kind of like an example of what we've planned the monitoring of the registrar status to look like. By using this API, our registrar would be able to check their own information as recorded with ICANN. So basically, they could track the deposit schedule that they're required to follow, which



changes and as stated in the specification, it changes according to the transaction volume of the registrar.

They could also track the last full deposit date that was received successfully which impacts directly the next scheduled deposit for that registrar, and of course, if there is any issue reported as tracked from the registrar notifications and the data escrow notifications.

Here's another example of how it will look whenever we are having issues, which is what registrars would want to avoid. Or how it would look if a data escrow agent reports that there has been problems with their deposits. As you see, the status element, which is highlighted in red, would switch from okay to indicate that there are issues with the reporting. The range of issues it's basically to indicate if a deposit was missed or if the verification was not successful, or plainly, in the case there's some issue with the reporting by the data escrow agent, we would see that there was no report received, which basically means that ICANN has no information for that date, and that's something that also needs to be remediated.

Now, as you saw in the output, we would only list the dates and the issue that we have associated with that date. In order to expand or get more details on the issues that they're having, we also plan to expose the information of the notifications that data



escrow agents provide to ICANN so that they can see, for example as we saw earlier, we have some error codes to indicate in a standard fashion the problems that may be found in a data escrow deposit by a registrar, so they could go and ask the RRI, the interface, to check the latest notification received by the data escrow agent for the registrar and see what they say. So, if it's a failure of a verification, they would be able to see what the data escrow agent said the cause of failure was.

We have an example on the screen, for example if two domain names in the deposit have an invalid syntax, or in the second example we also have a handle reference by an escrow record not found, which basically means for registrars that use normalize structure of handles, it would indicate that it's referencing a contact that's not found in the deposit. This, we think, would help registrars verify what ICANN knows based on the notifications that we receive basically in real time.

Expanding a little more on these benefits, as I was saying, real time monitoring would be available. They wouldn't have some of the issues that we discussed in the beginning with delays in communication. Having real time monitoring is like you would have at your disposal the data of the notifications that ICANN has received in that moment instead of having to write the data escrow agent and then wait maybe a few days to hear back and



so on. By that time, you may have already received a compliance notice or something, so that's something that's not good. Having RRI make this information available to registrars will definitely help in giving them the tools to remediate issues before they escalate.

Improving feedback, that's another of the benefits that we see. The use of error codes, as we all know, we have different accredited data escrow agents. Their verification process might differ from one another, but having the same form of reporting the results of a verification will just make it easier to interpret the causes of error and hopefully facilitate or provide more information to registrars to quickly understand what's wrong with their deposit and just work faster to address those issues.

So, we're also talking here about traceability, having the registrars have access to the DEA notifications that ICANN receives. The contents of those notifications will also allow to see what the data escrow agents reported on each of the dates, so that they can have all of the details that they need. For example, if they did a data escrow deposit, they can check when the data escrow agent has reported to ICANN that that deposit was successfully verified or not successfully verified, if that's the case. So, it's easier to keep track of their reporting status.



And lastly, accountability which has been one of the concerns that has been expressed by the registrar stakeholder group before. Having among the list of issues, if a notification of that escrow agent wasn't received would have that information easily available so that we can investigate further when there's no information and not immediately think that there's an issue with the deposit. Maybe the issue is just with the reporting, so it will also help provide more information whenever that's the case.

Now, what would be required for this to be implemented? There is a new proposed specification that it's planned to be published as an internet draft in the IETF next to the registry specification, the original specification for RRI. This has been shared already in the gTLD tech mailing list. That's available for public to review and just provide feedback. It will also require to update two existing specifications, the domain name registration data objects mapping spec that's already published in the IETF and the original RRI specifications for the RRI.

Now, these are specifications that are referenced in the registrar agreement so it's important to note that even though these specifications are updated, registry data escrow, in case there's any registry listening or aware that this spec is going to change, that remains unaffected and unchanged. The only changes is to



extend it. The functionality to include registrars, no effect on the registries. Data escrow agents, however, would be required to support the updated specifications and to switch from their current reporting process to use RRI, basically to use the automated notification system.

Registrars. None of this pretty much affects the content of the deposit, or the way deposits are expected to be generated. The use of RRI is completely optional; as I mentioned at the beginning, this is not something that's included in their contract, however, to enable a registrar to use RRI, they would be required to start doing the notifications so that this process is complete. Again, to emphasize, registries are not affected by this at all.

So, this is currently under development. It's not really ready at this point. We're still working on a timeline, and there would be communications once this is available for testing or for registrars that are interested in signing up to use this, but for registrars that are interested in using it, basically the only things that they would need to provide to ICANN is just the password that they need to use to authenticate to RRI and as RRI currently behaves, it only accepts connections from whitelisted IP addresses, so each registrar will have to identify which IP addresses they're going to be reporting from.



In terms of applicability, data escrow agents need to support the new specification and the automated reporting process. As you may now, there's an ongoing RFP to select one or more designated escrow agents for registrar data escrow, so that's part of the requirements included in the RFP. Of course, ICANN is working with the current designated escrow agent, which is Iron Mountain, and the rest of the approved data escrow agents, which are available in the link that's in the slide in the ICANN website. The specification has been shared. We're still working, as I mentioned before, on a timeline of when would this be available.

Lastly, now that we've seen a quick overall of the specs, we're basically just at a point where we're waiting for feedback. This is the mailing list where people can go subscribe, discuss, provide suggestions or complaints. Basically, that's where we are directing the discussion at and I just want to finish with an invitation for people to participate, and that's pretty much it. If anyone has any questions, comments, please go ahead.

VOLKER GREIMANN: Okay. Volker Greimann speaking. Key-Systems, Registrar. I have a couple of questions. Let's start with the positive. I really like the information queries thing. That is helpful. That allows us to check, double check and make sure that we will not get



any unwarranted notices that we haven't deposits even though we had like we are getting now.

Not a big fan of the verification thing for multiple reasons. First, I cannot really imagine how this would work when you have differentiated access. For example, if you have one level of access for police, one level of access for lawyers, one level of access for the public and everybody gets a different WHOIS, what would we escrow? Would we escrow the full WHOIS? Would we escrow one WHOIS? The one WHOIS version would we have to escrow all of them? How would you check whether these match? How would the escrow provider check how these match if they only have access to our WHOIS for a certain level of details? The escrow provider might not be entitled to look at the full WHOIS records for example. So that would have to be taken into account, different access levels.

Second point is, what if a registry in a thick WHOIS environment changes the info that we provide them? For example, if you look at a registry like dotAmsterdam, which I applaud them for redacting WHOIS data for private individuals in accordance with the GDPR. Their data that they show in the WHOIS will not match the data that we sent to the escrow provider. Will we get a fail for that? Will we have to defend all the data that we



provide to the escrow provider towards ICANN? Will we have compliance problems for that?

Where does this verification thing in its entirety come from? What's the basic reasoning for that? I didn't understand that either. And finally, will this be also applicable to the incumbent designated provider or only to the new ones, and if so, why?

FRANCISCO ARIAS: Hi, Volker. This is Francisco Arias from ICANN org. Let's see, where do we start? First of all, this is not changing the requirement for registrars regarding data escrow. Nothing has changed.

> Regarding your comment about what is escrow and what is shown in RDS; I'm using the term [inaudible], since I'm involved in RDAP, but anyway. I will make the differentiation. One thing is what is to be collected and the other is what to be shown in WHOIS. I don't think they are necessarily linked. Of course, you cannot show something that you don't collect, but that's a different story.

> But, like you said, in this effort, this is not about changing any requirements, so I don't think that is a problem in that sense since nothing is being changed.



Now, you asked also where does this apply to the existing data escrow provider to Iron Mountain. The answer is at the moment we are working with them to see how we can make this happen. We don't yet have a response on that regard, but at least the intent is to start with the data escrow provider or providers that are selected from the ongoing RP. Did I miss another question from you?

- VOLKER GREIMANN: Yeah, just the how is tiered RDS access that we might provide at a certain point or differentiated access that a registry may provide being handled if we only have a certain amount of data that we can send to an escrow provider? How will they verify, get something that will definitely be different?
- FRANCISCO ARIAS: This is Francisco Arias from ICANN Org. There is nothing here about verifying data against RDS.
- VOLKER GREIMANN: I thought there was some verification requirement on the screen just now.



- EDUARDO ALVAREZ: Yeah. We can go a couple of slides back. These are some sample verification error codes that we're proposing, but none of these error codes are related to matching against WHOIS or RDDS. These requirements or a verification process is basically just that the deposit is compliant with the registry data escrow specifications, which just refers to structure, syntax, format, not necessarily about accurately matching WHOIS. RDDS is completely separate from the data escrow deposit.
- VOLKER GREIMANN: Okay. I misunderstood that. Thank you.
- UNKNOWN SPEAKER: [Inaudible], DNS Africa. So, let's say when this goes into effect, as a registrar, will I be able to sort of back out to go back and forth between this? If I switch to using RRI, can I then say, "This is not working out. I want to go back to what I had previously." Will ICANN support that? I'm just asking because I don't want to be stuck in a position where you go, "Nope, I've made a mistake. I can't back out."
- EDUARDO ALVAREZ: Yeah, surely. Like I mentioned before, this is completely an optional functionality. It's not something that can be enforced.



Basically, just having the access to RRI, that's just what it requires, just to participate in reporting. But if someone is just not interested, they can just remove their account and that's it.

- VOLKER GREIMANN: Regarding the IFP, what's the timeline that you're working on or planning on right now? When will we be able to switch to one of the new providers at the same commercial terms that we have or ICANN has with the existing provider?
- FRANCISCO ARIAS: This is Francisco Arias from ICANN org. We don't manage that RP, so I'm afraid I cannot answer that question, sorry.
- HOWARD LEE: Howard Lee from ICANN org. I think Chris is managing, can answer a few questions for the RFP.

CHRIS: Yes, sorry, can you repeat the question?

VOLKER GREIMANN:Yeah, sure. I was just wondering about the timeline for the RFP.We have a deadline of May 25th about for us that we have to have



everything implemented for potentially a European provider which would be preferable in the sense that we wouldn't have to transfer the data to the US. Therefore, we are wondering when will the IFP conclude and when will we be able to choose one of the new providers?

CHRIS: This is Chris from the ICANN organization. I don't recall off hand what we've published or talked about off hand. I know that the RFP for submission closed October 8th. Currently, we're reviewing the bids. I believe we may have some follow up questions as well that go out and then we'll be scheduling for those that meet the criteria that we have, we'll be scheduling demonstrations, and then we'll be reviewing that and figuring out who that is. My estimate would be that would be happening towards the end of November, beginning of December would be the time frame, but I don't have that solidly down off hand. This year, yes.

UNKNOWN SPEAKER: Hi. This is [Inaudible] for the record from DENIC, one of the accredited data escrow agents and third party provider. I appreciate it really because we have a pain at the moment. We have both solutions, we provide data escrow to registrars and to



registries, and it's completely different. For a registry operator, it's straightforward. You're using this actually, and I would like to see that also for the registrar part in some future.

Regarding the DA and the RFP and the requirement. It's a requirement of the RFP and we have to start the service, if we are chosen a designated escrow agent because we sent the proposal also from our side. From the first of April 2018. So, we don't have information about the timeline for any testing systems. We have to implement that, so we need time. We need the root sources. We have to allocate it internally, so it would be great if we get more information on this. When you expect to provide a development system or a system where we can develop against them?

- FRANCISCO ARIAS: This is Francisco Arias from ICANN org. We are working on that timeline. I hope we can have that in the next few days, but I don't have yet a date when I can provide a timeline.
- ALEX SCHWERTNER: Alex Schwertner from Tucows. I would just like to echo what Volker mentioned, and that is regarding the RFP and the timeline. May 25th is a pretty hard deadline. I'm not sure with



the progress the community is making today or so far at this meeting that there will be significant changes.

So if there is a likely scenario that it will be impossible for many registrars to deposit to Iron Mountain, and it would be bad for the community if we were to stop depositing to Iron Mountain and not be able to deposit to someone else which would lead to a situation where we're not depositing at all, and that would be really harmful for the community. So I can only encourage everyone at ICANN to move this RFP forward and try to get us to a solution where we have an alternative base in EU in place well in advance of May.

FRANCISCO ARIAS: This is Francisco Arias from ICANN org. I just wanted to clarify something. I wasn't talking about the RFP at all. I'm not involved in that. I don't manage that. What I was talking about was the interface. The interface is the one for which I still don't have the timeline and as soon as we have it we can share it, but I just wanted to differentiate between those two things.

ALEX SCHWERTNER: I know. The person who is responsible for the RFP is in the room so I just wanted to hear that.



EDUARDO ALVAREZ: Any other questions in the room? Or I don't see any participation remotely. So, if that's the case, I would just insist on, especially data escrow agents, the registrar just to participate in the mailing list so that they can receive all the updates, provide their feedback on the specifications and the functionality that is being proposed.

> Just basically we're welcoming all of your feedback, and being a technical specification, it may require time for people to review it, so just feel free to send any suggestions or comments to the mailing list and we'll address those. So, with that, I think we can close and thank you very much everyone for coming.

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