IETF 93 – DBOUND Working Group
17:40-18:40 Monday, July 20, 2015
Meeting Minutes

Called to order at 17:40.

Blue sheets distributed. Sam Weiler, Dan York jabber scribing; Steve Sheng taking notes.

[chair slides]

Pete (chair) gave the IPR advisory.

Murray (chair) highlighted the two problem statement documents that exist, and advised participants to review them if they have not already done so. Pete and Murray also explained that we are trying to identify the set of problems we hope to solve, and whether they require independent solutions or a common one. We hope to have answers to these questions by the end of the session, and new milestones.

The list has been discussing whether there is a line between "private" and "public" names, and whether those are even appropriate terms to be using.

Kurt Andersen: In addition to the listed cases, we'd like to be able to determine an abuse contact for a domain. This was mentioned on the lists.

Andrew Sullivan: I think that's a completely different problem. I wish WEIRDS had solved it. What we're trying to do is find administrative boundaries in the DNS, and what you're trying to do is find information that's outside of that problem, so we need to make that distinction.

Dave Crocker: The first three points on this slide ("Defining The Problem") have something in common, which is extraction of semantic details after you know where to go. We don't want to answer these questions in their entirety; we want to give just enough answer to pass to the higher layers. The fourth is a DNS mechanism for going to a place.

[Andrew Sullivan's slides]

Casey suggested most of these points. Let's walk through them and see if we get agreement on each.

["cookie" question]

Is this in our problem space? (yes)
Is this the right question?

Dave Crocker: We only need to answer part of that question, the mechanism part. (agreement in the room)

Andrew: “Do I have enough information about this name to make a decision about this cookie?”

Jeff Hodges: Suggest “Is one enabled to make a decision…”

Casey Deccio: Might be helpful to consider current solution to the question to set context; for example, the current solution is the “ancestor” question.

Andrew: …and how is it bad.

Andrew: What would success look like? For example, portability: Will this work in a lot of different contexts?

Casey: Does it work offline? Is it self-contained?

Pete: Is this simply cacheability or is there more to it than that?

Casey: Don’t have a full answer, but consider the Public Suffix List (PSL), which can be downloaded entirely.

Andrew: PSL is an interesting example: It is portable, but not scalable. We might want to consider that tradeoff when evaluating success of a solution.

Christian Huitema: What happens when “I don’t know?” What’s the failure mode?

ACTION: Kurt Anderson suggests a glossary of these terms (Portability, etc.) on the WG wiki. The chairs put Kurt in charge of this.

[Andrew Sullivan presenting]

Scalability: We know what that means, using the PSL as an example.

Compatibility: Can people drop this in and start using it?

Complexity: How hard is it to build and operate this solution?

ACTION: Andrew to drive revision of the definition of this question.

[“what domain name to show” question]

Pete: Are there any browser people in the room?

Dave Crocker: This is the wrong group to be asking. We need to be able to feed the information to the browser.

Andrew: Not the right question; what about Dave’s idea?

Stephane Bortzmeyer: Do some people have a need to display the relevant domain name? If yes, should we develop the mechanism to do so? We already have an RFC for cookies.

Wes Hardaker: Does the application layer need to know where the separation layer is between the two parts of the name? We understand the need, but we do not understand UI matters.

Ted Hardie: This is a much more narrowly-scoped question than that. Many applications want to do service discovery, which sometimes has a tree-walking urge for which DBOUND might provide answers. I'd like to have use cases more narrowly scoped. I like this one because it's well-scoped.

David Lawrence: We're bad at UI issues, but we're good at defining semantic issues.

Andrew: Seems to be agreement that the general semantic question is one we'd better be able to solve, but not this specific question. The success metrics are the same as the previous case.

ACTION: Andrew to drive revision of the definition of this question.

["are these two domains under the same administrative control" question]

Ted Hardie: Should this work for two arbitrary domains, or might they appear together in a series of labels?

Andrew: Glad you asked. There are two ways we could go there: We could absolutely limit this to ancestor/descendant relationships, but others believe cross-tree relationships are also important. One of those has no backward compatibility story at all today.

Ted: Would it be fair to restate that slightly more narrowly: "Could X be DNAMEd to Y?" (groans from the room) I prefer to stick to ancestor/descendant for Round 1.

Peter Koch: Is "domain" a node or a subtree?

Andrew: Good question. That seems to be another topic we need to add to our use case problem. I would tend to say it's a node, because that's what a "domain name" is, but I recognize there are others who don't believe that, and who think that subtree relationships, in particular further down the tree, are fundamental.

Peter: Have you defined "control"?

Andrew: Administrative control over the name, whatever that means, as different from the zone administrator. In one of the drafts, I think it's called the "policy realm".

Peter: At a certain name, you offer different services.

Andrew: Right, and we also need to be able to say "these two things don't go together." You don't want blogger.com to be able to set it up so that bob.blogger.com can influence charlie.blogger.com.

Peter: We need to define "control" here. We have cases where for some services, two names are identical; for other services, they are not. The provisioning part of the DNS is important too.

Andrew: Provisioning is out of scope.

Adam Roach: I think that's a really thorny issue. "Who's going to issue the SSL cert for x.blog.com?" We need to know the answer to "control over what?"

Andrew: We need to add a question about whether this should be scoped to the service or scoped to the domain name. This has been discussed in some of the drafts. We talked about SRVs, but we didn't get anywhere.

Pete: SSL certs are always part of the suffix or not. The PSL makes no distinction between services. This might suggest an answer to the questions about whether we can accomplish all this with a single solution. It looks like we have a suite of questions needing a suite of solutions.

Ray Bellis: Back to Ted Hardie's points: We need to decide if the cross-domain issue is in our problem space; the solution space we adopt will be affected by that question.

Pete: HUM if we need to address (or not) the cross-domain issue. (there was a positive response)

Daniel Gilmore: This is a complicated problem and there are clearly scenarios in the real world where this would be useful, and it would be a mistake to block the strictly hierarchical zone control question by trying to solve this as well.

David: Note that "address" is not "solve".

Casey: We should ask if people agree with (Daniel's point).

Daniel: DNS already represents points of hierarchical control, and it's important that we explicitly denote where those points of control are so that we can see them on the network. This is a separate issue that may be useful in many contexts, but the visibility of the power dynamics is important to solve.

Andrew: Two separate issues here: (a) is this a name-based thing or a name-plus-service thing; and (b) whether the hierarchical stuff, or arbitrary names, is important, and what the relationships are among those things.

Alex Mayerhofer: We should stick to the hierarchy; the problem is well understood, and the number of relations between two objects in hierarchical space is small. The number of relations in the cross-domain case is much higher. We shouldn't limit the WG from having to declare failure if we can't solve the cross-domain problem, so we should try it but be willing to drop it rather than letting it block other solution work.

Wolfgang Riedel: How is the SMTP space different from the cookie space?

Andrew: We'll get to DMARC in a moment, but it doesn't solve all problems.

Casey: Maybe name vs. service and cross-domain vs. hierarchical are useful alternative problem statements.

ACTION: Andrew to drive revision of the definition and scope of this question.

[Andrew, Kurt, and Murray described the DMARC use case, which uses the PSL.]

(debate about definitions, what DMARC does, and what's in the PSL)

Andrew: So the question is: What is the organizational domain, given an arbitrary domain? There's also an important compatibility issue since DMARC actually says "Don't use the PSL when there's something better", but DBOUND's solution might not be compatible with what the PSL does.

Kurt: That's expected.

Casey: We also need to consider the idea of "sane default". This relates to complexity and compatibility.

ACTION: Andrew to drive revision of the definition of this question.

Murray: Five minutes left, how do you want to conclude?

["certificates" question]

Andrew: We really need to pound on these things on the list. The reason this question is relevant is because a certificate authority is not in the middle of this kind of transaction. They're trying to make statements about a name. Do people think this is any different than the Organizational Domain question?

Ted: I think there's a related question here, but this is tricky; in certificates, in addition to the name, you have subject alt-names which can have wildcards. In which parts of the tree is this an issue? Perhaps: "Can I infer that this is a valid place to do that wildcarding?" Or "If someone is asking for a wildcard of this type, how can I be sure that the proof of possession they're using is under that wildcard?"

Peter: The semantics of the DNS wildcard is different from the certificate wildcard. Depending on the solution, you might not be able to answer that question.

Andrew: We need to come up with new milestones given this discussion. (chairs concur)

ACTION: Chairs to drive development of revised milestones given this discussion and other ACTION items.

Adjourned 18:40.