# IETF 97- MILE WG (November 18, 2017)

### **MILE Status**

[Nancy Cam-Winget]: Alright, good mid-morning everyone. We are at the home stretch. Last session. We've got four presentations so if we keep it in time, we can maybe get out early. So, next slide please. So, Takeshi, my co-chair is on Meetecho, but, I have asked David Waltermire to help me here since I can't run multiple machines here. So, thank you David. With that said, I am not going to read through the note well because you should know that well. Quick agenda bashing. We are going to be providing some status on the current drafts that we have active. I will give you the brief status on the WG status overall. Thank you Takeshi for providing the slides on that. One quick change. Mio has an early flight so for the presenters, if you are ok, I would like to put him after the MILE status and then we will continue on the same order. Is that ok with everyone? <yes>

[Nancy Cam-Winget]: Status for the WG. The WG is working on multiple drafts and updates will be provided today. With respect to the schedule, the implementation report should be published as an RFC and has been shepherded by Take. I am the shepherd for the ROLIE draft so if we can get the updates to the draft we can get that going and strive to get that done by the December timeframe. Hopefully, by the next IETF, which is 98, we should be ready to do a last call for the guidance draft. We are still working through issues on the ROLIE draft. Kathleen, we are going to do another last call to make sure we get more feedback and have time to update the draft. Same thing with the XMPP-Grid. I will provide an update there. By the next to next meeting, 99, we should be ready to do a last call for the IODEF guidance draft and the CSIRT ROLIE draft.

[Dave Waltermire]: One question on the ROLIE CSIRT draft, is it still a personal draft? It needs to be adopted at some point.

[Nancy Cam-Winget]: We should do a consensus call here and take it to the reflector.

[Nancy Cam-Winget]: I want to thank Stephen for Jabber scribing and Danny for note taking. [Nancy Cam-Winget]: First up, is the guidance draft with Mio.

# **Guidance Draft Status**

[Mio Suzuki]: An overview was presented and the document is to provide guidance for IODEF uses and representation for security indicators and use cases. I will show updates from previous drafts and then the to-do list. This is the update from the previous draft. We modified examples in the appendix to follow the IODEFv2 schema. Currently, there are whole examples in the draft. However, I don't have much confidence in the contextual correctness. So, if you have time, could you please check that. Please give me comments and feedback on the draft.

[Nancy Cam-Winget]: So, Mio, would you like more feedback on the review? [Mio Suzuki]: Yes.

[Nancy Cam-Winget]: We will ask on the mailing list, but, can we get volunteers to review the draft? <Chris Inacio and Roman Danyliw volunteered>.

[Takeshi Takahashi]: Thank you. Let me just talk a bit more about the status. Mio has already done what we did with the draft. So, we want to make sure we are happy with the draft and initiate WGLC before the next meeting.

[Nancy Cam-Winget]: So Takeshi, I did ask for a couple of people to review the draft and Chris and Roman agreed to review. The first question I should ask is how many people have read this version? Takeshi, I would like to get some feedback. Then, in the email, we will do the question (consensus call) on email to ask if the group believes the draft is ready for a last call. Ok? [Takeshi Takahashi]: Yes. Thank you.

# **ROLIE Draft Status**

[Stephen Banghart]: I want to talk with you about the major changes with the last couple draft updates to ROLIE as well as cover the major review questions and issues that we have left to cover before we do the WGLC. The major changes that happened in the -04 update from -03. We did a decent amount of work in the front mater of the document and boiled it down with the same kind of intent, but, just more concise. One of the major kinds of changes is that we combined authentication and authorization and more-or-less moved a lot of the normative requirements out of the document and are intending to create a separate document that will contain the requirements for authentication and authorization. The TLS requirements that were originally in ROLIE were iterated and expanded based on the TLS requirements from RFC 7589. They had a requirements section that had a format that was useful for us. The /resource requirements were expanded as to what the expected responses are for sending requests to the / operator. The actual response codes are now set normatively. The link relationships were centralized and more sensical place and everything references these sections and make this a little clearer and referenceable. The format element is defined which is a new element that is an extension to Atom syndication and ROLIE format holds information about the data format of the content. The actual content and schema was added in that version. The search requirements were removed and will be added in a separate ROLIE search draft. The extension points ROLIE format, categories, link relations are described in greater detail at the end of the document and how to use the extension points. The IANA registration section, which was unfinished in the -03 version, was completed and filled out and now they should be complete. The schema was also added for the ROLIE format. This included a lot of normative changes.

[Stephen Banghart]: Not too long after -04, we did an -05 version that contained a few more changes that we wanted to get in before this meeting. We expanded the terminology section at the beginning of the document. Now, it's all in one place. The Atom pub category document allows for a centralized location of all categories that a ROLIE server provides. We decided that it would be valuable to have a centralized location for all the categories a ROLIE server provides that was originally not required. We decided that it would be valuable for a server to report on all of the categories that it provides. So, we added that in as a requirement and there is now a standardization location. A client can get a category document and see what the server provides. It also includes general editing to make it more concise to implementers. The format parameter type was in -04 for the IANA registration that is not being registered in the IANA section so that was just extraneous text that was removed. The -04 version contained a 35-page RELAX NG schema that included all of Atom syndication and Atom pub so we removed that and only included the relevant pieces of the schema that have changed throughout the document. That is a summary for the major changes in the current version. We have a few changes pending in GitHub for a planned -06 version, but, they are almost entirely editing and clarity edits and nothing really of note.

[Stephen Banghart]: There are a few things that we need to do to get this done. These three review questions are less of an outstanding issue and more of things that need to get reviewed and will be answered by people reviewing the document. Are normative and informative references right. Need to check and make sure the references are in the place they belong and the XML snippets we have tried to keep those up-to-date, but, we would like those to be validated against the ROLIE schema. This is a question that we hope there are people here in the room or on the mailing list that can help us with the security side of things. We have TLS requirements and a security considerations section and need some people who are knowledgeable about those things and give us feedback on those security sections and let us know if they are what you expect.

[Stephen Banghart]: We do have a few substantive issues that we need to talk about in the group. The first issue is one that came to light while we were working on a CSIRT extension document. There are identification and characterizing properties of data formats that don't belong in our current extension points. We have link relationships and we have categories. For example, an IODEF ID is a really important probably for someone trying to get information of a ROLIE server to say get me this IODEF ID. The only way for them to get this is to download the content and then search it. If there was some way of arbitrarily exposing these very important attributes out of a data model out of the attached content that could save a lot of time for people trying to search. So there are a couple of options for trying to solve this problem. We have some examples for each and a proposal for each. The first option is to create a new extension point ROLIE property which is a fairly free-form property that is constrained in ways to make it reasonable and as safe as possible and is otherwise fairly unrestrictive that would allow for the exposure of these important elements to someone that needs them. Then, register those properties so that they are tracked and understood. For example, the CSIRT extension document may register in an IANA table ID and date which are two important attributes of an IODEF document that are not exposable in any other way. The second option is to basically require any time that you want to do that, it has to be a local definition instead. Some type of locally namespaced IODEF element that you add in to expose that information. Here are two examples of option 1 and option 2. Option 1 is the relevant section. There is an actual ROLIE property element with a scheme. ROLIE, CSIRT, IODEF is a scheme that would be established by the extension document. So, ROLIE CSIRT would establish this scheme and the scheme contains a number of names. In the document, that defines those, it defines the semantic meaning of this information and the actual data that goes in the content tag. Option 2 includes locally defined namespaces which are shorter than element names, but, there are a lot of compatibility issues and these are locally defined so there isn't really any way to easily communicate it in a public distribution use case. Option 1 and option 2, what are people feeling about this? Do we call for consensus on this issue?

[Nancy Cam-Winget]: No, you just get opinions.

[Stephen Banghart]: Are there any strong opinions between option 1 and option 2?

[Adam Montville]: I just have a question about option 1. ROLIE is something that CIS is interested in, but, not necessarily exclusively for public broadcast of things. So, the option 2 is ok for us in a lot of cases where we have this closed environment.

[Dave Waltermire]: I think the difference between option 1 and option 2 is focused around we have these namespaces for which these additional properties are going to fit within. Do we want to have a control process for adding new namespaces in ROLIE through an IANA registration so that we could manage the namespace of namespaces essentially? Or, do we want to allow arbitrary use of arbitrary namespaces by implementations.

[Stephen Banghart]: It would preclude it is the important thing here. Atom allows for you to include any elements that you want any of the time and it will not fail validation if you send it to someone who doesn't understand it. It will just ignore it.

[Adam Montville]: I like option 1, but, I also like option 2 to be able to things privately that doesn't require me to go out to IANA.

[Stephen Banghart]: If you picked option 1, you could still do option 2.

[Nancy Cam-Winget]: I am trying to understand the differences between how I would define it from general terms. Option 1 gives you the ability to dynamically create a new property and define through that schema the semantic intent behind that property.

[Stephen Banghart]: Yes.

[Nancy Cam-Winget]: For option 2, when new properties are exposed, not only does it go through the IANA process, there has to be an understanding of what that namespace and schema would look like.

[Stephen Banghart]: Option 1 is the IANA.

[Dave Waltermire]: Technically, we could work it so that we could do an IANA registry for either. The other benefit to option 1 is you can do schema validation.

[Roman Danyliw]: Schema validation is also in a lot of feedback when we did IODEFv2.

[Stephen Banghart]: So, option 1 is the one with IANA registrations.

[Henk Birkholz]: Adam, you can do your own stuff with option 1 quite well without publishing it. Also, distributed schema seems to be a thing for ROLIE. So, if you want to have consistent semantics with consumers and providers, you probably need at least the registration thing, but, also a distribution of schemas which is also sometimes a problem if you scale big. I don't know how you think this will evolve in regards to versions and additional namespaces and this could mess with every XML-ish thing and could be a big hassle at some point. So if you don't really require versioning and are pretty confident that you are stable for the sake of simplicity option 2 is actually more like how things are done now. But, if you want to have this rule out of the XSD and consistency of versions, and strongly defined, I would recommend option 1, but, depends on your overall strategy of MILE and ROLIE in combination. Option 2 is the way more flexible one and you don't have battle all the schema versions.

[Stephen Banghart]: You can still do option 2 with option 1 selected.

[Henk Birkholz]: if you say in the draft do option 1 and then you do option 2, you are basically messing it up.

[Stephen Banghart]: It would support the private use, use case which is half of the ROLIE use case.

[Roman Danyliw]: Am I misunderstanding? Is there a third option: option 1 and option 2 at the same time? I only ask because I feel like we went through that discussion when we went through IODEF and we decided we both classes of options and I don't understand why we wouldn't do it here.

[Stephen Banghart]: So you would pick this option 3?

[Roman Danyliw]: I value extensibility.

[Stephen Banghart]: Ok.

[Takeshi Takahashi]: I wonder whether we can use the combined approach. I like the way how IODEFv1 allows you to use the IANA and private extensions.

[Stephen Banghart]: Ok.

[Dave Waltermire]: That sounds like two +1s for option 3 which is to support option 1 and option 2.

[Nancy Cam-Winget]: Let's finish the queue. Then, we will allow for the hum.

[Dave Waltermire]: I want to support that as well thinking about it more after this conversation.

[Nancy Cam-Winget]: Let's do the hums. Option 1 is to do the IANA registry through the creation. Option 2 is what you've listed there. Option 3 is to merge the two options to allow for both. Correct? <option 3 wins>

[Nancy Cam-Winget]: I will take this to the mailing list for further input.

[Stephen Banghart]: All of these issues are on GitHub including the review questions if you want to comment. Issue #2: We have talked about this before briefly, but, we want to get some final discussion in on it as we approach the deadline of this document in general. Data model enumeration/registration. The concept here is that right now the ROLIE format element describes the data model of the content. The question is should that be registered at the time when you write your extension document that talks about the information type. There are some pros/cons of doing this data model registration or data model enumeration. It does provide a registered location for these. It would be like a namespace for IODEF, it would define the content as IODEF and put it in the ROLIE format. It does provide a centralized location for these data formats. However, it requires the extension document writers to actually just pick a namespace for a data model and publish it to the world. If people get the ROLIE format element it might not actually mean anything to the client that receives that. It is basically a question of does it provide value to require the extension document authors to register those data formats.

[Dave Waltermire]: This was driven by feedback we got at the last face-to-face at IETF 96. We started actually working on doing this. Implementing some kind of IANA registry for registering the formats that are used within ROLIE. We quickly started to realize we were creating a lot of work for every extension author. The more work we were creating the more we got scared because we wanted to try and make it as easy as possible to create a ROLIE extension because we want to see a lot of ROLIE extensions to be generated. This effectively allows for extensions to define what data formats are allowed, but, doesn't require them to be defined in IANA registries and don't have to write a bunch of the IANA considerations to create an extension. We feel that is a good balance between being explicit in what is allowed, but, not being too formal in how it's being registered. We are kind of looking for permission to move forward on that as well as hear any other considerations that might take us in one direction or another.

[Roman Danyliw]: So, are we talking about documenting the extension, but, not registering it?

[Stephen Banghart]: That is right. The extension document can still discuss or even talk about the different data models that might be reasonable to use for that information type and how they might be used, but, to not register them in a IANA table.

[Roman Danyliw]: So, how is that different than option 2, but, you chose to make a draft?

[Nancy Cam-Winget]: As a chair, I guess the question that I am going to look at Kathleen since I am a total noob. When you say document, are you saying it would be an IETF document? Like we would have to put it through the RFC process.

[Dave Waltermire]: No. This is all about the format extension. There is the format element which contains a namespace attribute that defines the namespace of the referenced content of the ROLIE entry. It can also contain pointers to the schema location for the namespace, media type for the schema, and a bunch of other things like that. This is actually about, is the namespace that is used in the ROLIE format entry, does that have to be registered in some specialized IANA table for the ROLIE format element? That is what the question is. That namespace would then represent the model for the content that is being referenced by the given Atom pub entry in this case.

[Adam Montville]: Has anyone in the room read the ROLIE extension draft for software identifiers?

[Stephen Banghart]: The CSIRT extension is actually in MILE.

[Adam Montville]: Right. So, it has a format in their right and you could look at that draft and see an example of what we are talking about.

[Stephen Banghart]: We actually have slides about the CSIRT draft at the end for this.

[Nancy Cam-Winget]: But, as you are pointing out Adam, it is an IETF draft.

[Stephen Banghart]: Yes, the ROLIE extensions are IETF documents that register information types because information types are one of the category extension points. Those are registered in an IANA table through an IETF document. So, the information types which are really what all of the extensions are going to be. The idea here is that here is my information type and formats that are reasonable for my information type which is the planed extension format which is exactly what the CSIRT extension does. It talks about incident and indicator. For example, IODEF can do these things, STIX can do these things. We talked about the data formats. That's what is happening now in an IETF document.

[Adam Montville]: I am in the middle of writing a checklist extension to ROLIE for configuration checklists. It will probably list in there a format of XCCDF perhaps, but, I don't necessarily want to have to go and register that format.

[Nancy Cam-Winget]: Yeah, that makes sense.

[Stephen Banghart]: That's the intent.

[Dave Waltermire]: Would it be helpful if we sent an example for these options to the list to further clarify this? Or, do we feel we have a good enough understanding here to make a choice?

[Nancy Cam-Winget]: The question on the table is do you understand what is being asked?

[Chris Inacio]: I think an example would be helpful although I do think I understand what is being asked. It's not clear to me that we are mired in the technicalities of what we are doing, but, I don't necessarily appreciate the impacts. I get it. You want to make an extension; you don't have to make an IANA registry. Or, we could have private extensions that don't have IANA registries. It's not clear to me that even if you say in the ROLIE draft that you have to have an IANA registry that people have to do it. They could always not bother. You can state "must" all you want, but, implementations don't have to comply with that. So, it seems to me the more realistic question is, is there a way to slice namespaces to say that these are registered versus not.

[Dave Waltermire]: Namespaces are URI so URIs can handle that namespacing in the identifier.

[Chris Inacio]: Right, so I would state it there. This seems like a fruitless argument unless you are going to say something like we are going to make sure that we have namespaces that says it is IANA ROLIE or something like that.

[Dave Waltermire]: Right. The argument is really to IANA Register or not to IANA register.

[Henk Birkholz]: I want to make a comment exactly that.

[Nancy Cam-Winget]: I will cut you off after that.

[Henk Birkholz]: I just heard you do register the information type.

[Stephen Banghart]: Yes.

[Henk Birkholz]: For each extension. So every new draft will go through the IANA registration process by registering the information type. You just want to avoid having data formats types to that registration. So, I think it is misleading to say we are voting on not registering or registering something, you are, we just don't want to go into more detail for the format which I understand.

[Stephen Banghart]: Yes, we are reducing the registration level.

[Henk Birkholz]: So, I would like to clarify the question and this question is way easier to answer than the question that was stated I think.

[Chris Inacio]: Can you actually do that? Can you register something in an IANA registry? Presumably using a document or are we using expert review. Can you register it and reference something to which there is no reference?

[Nancy Cam-Winget]: Yes, and then you guys listen to me - You are done ok.

[Dave Waltermire]: The registry would be specification required so the document making the registry would be the reference.

[Nancy Cam-Winget]: My suggestion is a clarification should get made and examples should be provided if you could provide it to the mailing list so that we can move this along. We would like to hit the December deadline. So, if you can provide an example of what that means and try to provide your

perspective of the implications, I think that will help address Chris' point. He kind of understands it, but, doesn't quite see the full impact. I think that would help.

[Stephen Banghart]: We can put together something that expresses that.

[Nancy Cam-Winget]: FYI, you are only on slide 7 of 16 so we need to move this along quicker.

[Stephen Banghart]: Here's what I will do because of this time issue. We have a number of issues, I will bring those to list is the best way to handle the remaining issues and I am going to go through and give the brief talk about the CSIRT extension document that was recently published.

[Nancy Cam-Winget]: We've got time, but, there are two more representations after you. How about I give you 10 more minutes?

[Stephen Banghart]: We can do that. The last couple of issues are easier. ROLIE's current status is informational. There are many normative references in ROLIE. We would like to switch it to a standards track document. Our proposal is that we switch it to a standards track document. Is there any strong opinion opposing that?

[Nancy Cam-Winget]: You get to do another hum. We could ask the question and we will take it back to the mailing list. The question on the table is, do you agree the ROLIE draft should be made standards track as opposed to informational?

[Kathleen Moriarty]: I think it should be experimental.

[Nancy Cam-Winget]: Ok, so experimental versus informational. How many implementations are there?

[Dave Waltermire]: We are writing one. Someone else is.

[Nancy Cam-Winget]: There's three. So I am going to...

[Stephen Banghart]: I already got one hum so if we don't want to do one that's ok. I am not going to be heartbroken.

[Nancy Cam-Winget]: Let me run the meeting please. Those who believe this should be an experimental draft please hum. <nothing>. Those that believe this should be a standards track please hum <hums - standards track wins>.

[Stephen Banghart]: Ok, done with that one. Cool. These two issues are very closely related. Service documents are really important to the operation of ROLIE. We use the service document to determine what feeds you have available and the resource location of all of those feeds. If you can't find the service documents, you can't find the feeds, and you are out of luck. Right now, the standardized location of the service document is a should requirement in ROLIE. We would like to change that to a must requirement so that standardize location allows any kind of client to actually discover what is on the server reliably. Without this, it is going to be very hard for a client to discover what feeds are available.

[Alexey Melnikov]: Why don't you use well-known because there is another HTTP RFC that hardcoded URLs are a bad thing basically.

[Stephen Banghart]: It's only partly hardcoded based off of the server root.

[Alexey Melnikov]: But, still.

[Stephen Banghart]: Ok. I think with a well-known location you are still going to run into the same problems. It has to be advertised somewhere or retrieved from some known location at some point or else you won't find the service document.

[Alexey Melnikov]: No, no, no. There is ".well-known" which is a reserved prefix and you can have different types of documents and for that is IANA registries and you can go there.

[Stephen Banghart]: Ok, I understand what you are saying.

[Dave Waltermire]: Just to clarify Alexey, this is a template so the idea is that every organization that stands up their own ROLIE repository would implement this template providing a well-known location for that server to discover the resource collections that are published by the server? So, our intent is not to provide a single global well-known location, but, to allow each server to have a well-known location. That way a client would only have to know that location and the service name and it could basically go find it.

[Alexey Melnikov]: How does the client find out the location?

[Stephen Banghart]: It has to know the host which is a problem out of scope for this document.

[Dave Waltermire]: Could use service records or something.

[Nancy Cam-Winget]: So, no discovery?

[Stephen Banghart]: No host discovery, but, as soon as you know a host, you can find a ROLIE server there. But, host discovery is out of scope for this document. If there is room for a host discovery type thing that would be in a separate document. Once you have a host or list of hosts, you can check them all for ROLIE servers if this is a "must" requirement.

[Alexey Melnikov]: I think we need to have a discussion on this. I think we need to get people from HTTP that might object later on if you do the wrong thing.

[Nancy Cam-Winget]: I was going to ask for an expert review at the end.

[Alexey Melnikov]: Ok.

[Nancy Cam-Winget]: I don't know if that will help right, but, what I am hearing is we need further discussion and so in the interest of time what I would suggest is that we continue, for this one, the discussion on the mailing list.

[Stephen Banghart]: I appreciate the feedback. We are looking for people who are aware of these types of things and I am really glad you brought that up and we will talk about it on the list and get as much feedback on it on the list to do it right. With that in mind, the categories document is the exact same thing. It is another top level document that just lists the categories. It is the exact same question as the service discovery document so we will discuss it at the same time. It is more or less the same issue just with a different document so no reason to talk about this now. If you are interested this is what a category document looks like. It just lists the categories that a ROLIE server provides. This will all go to list.

[Stephen Banghart]: Those are the issues that are open. We resolved several of them and the rest of them will go to the list to get more review. So, ROLIE is in WGLC and soon it is going to WG last last call. So, we need to get as many eyes on this as possible. Would anybody who have comments, edits, or anything you care about, we need your feedback and review. You can go to the list, you can go to the GitHub, it doesn't matter. Just get you reviews in, if you care about them. We are building ROLIE extensions.

[Stephen Banghart]: We have a CSIRT document in MILE and there is a software descriptor extension in SACM. We want more of these extensions and there are a couple more being built by people here, but, there is always room for more extension types and information types we would like to see ROLIE extensions for. If you are interested in that and need any help, you can come talk to the authors. We would happy to help you put together an extension. You can also use the current extensions as a template. Please come look at ROLIE CSIRT extension draft which I am going to go over quickly. ROLIE CSIRT is the draft ads the indicator and the incident information types to ROLIE. This is text and requirements that used to be in the original -02 or -01 version of ROLIE back when it was designed as an IODEF carrier. Since ROLIE can now carry many different things, the IODEF and CSIRT-specific text was pulled out and is now the ROLIE CSIRT extension. It includes all the information type sand normative requirements that went along with using the IODEF format. This was recently uploaded as a personal draft in the last couple of weeks. We would really like to see this document adopted into MILE and take a look at it and get it back and get all that text that was taken out of ROLIE and back to MILE. That's what we would like to have happen to CSIRT. We added two IODEF attributes that were very important in IODEF as categories in the whole category extension point. So, purpose and restriction have been exposed as categories in ROLIE entries. For example, find all of the IODEF entries by their purpose or by their restrictions which makes it easier to find those things without having to download the document. If there are other IODEF attributes that make sense as categories, please let us know. Please come to the list or whatever so we can add them as categories in the extension system. As we talked about earlier in the ROLIE extension property, it looks like we have support for option 3, we are going to add the IODEF ID and the IODEF date as the first of those ROLIE property exposure so that you can find the IODEF documents by those attributes so you don't have to download the whole thing. If you think there are other properties for finding IODEF documents, please let us know on list or otherwise. We need development help and review for the CSIRT document as well as the SACM document for software descriptors. It's a brand new document -00 draft that was uploaded a couple of weeks ago and support working on that as we can. Come open issue son GitHub.

[Dave Waltermire]: About 80% of the text in this draft is previously adopted text by the WG so it would certainly like to see this be adopted by the WG.

[Stephen Banghart]: That is the ROLIE CSIRT document that we would like to see adopted as soon as possible.

[Nancy Cam-Winget]: So what I would suggest you do is announce that and solicit feedback in the mailing list and we can discuss it from a time perspective. We could call for consensus for adoption at the Chicago meeting.

[Stephen Banghart]: Ok.

[Nancy Cam-Winget]: Coming back to the base ROLIE draft. That needs to move forward until we can do the extensions. For that, you've got the whole list of issues.

[Stephen Banghart]: We have resolved several.

[Nancy Cam-Winget]: Right, but, you still have a set and what I had suggested to Alexey is to do an expert review, but, I think that should come after we have resolutions for the current issues that we didn't have time to poll here. So, just let me know and through the mail as well and we will monitor, but, you need to make sure just because not everyone like me goes through the issues, make sure to put them back out on the mailing list and we will get the discussion going.

[Stephen Banghart]: We will be on the mailing list trying to get through these issues as fast as possible. So, if there are not any last minute comments, questions, concerns, I will end my very long presentation.

# XMPP-Grid Draft Status

[Nancy Cam-Winget]: I had three or four different commenters provide feedback on the XMPP-Grid so many thanks for that. A lot of it was clarifications, there was a long discussion on the discovery mechanism and we debated because I had assumed the base XMPP-Grid does talk about the pub-sub, but, we decided and agreed through the mail reflector that it would be more explicit if we just referenced that actual extension of the pub-sub in the draft. Basically, there were some clarifications, some typos that we fixed, and other editorial changes. I just mentioned the pub-sub so XEP-0060 is the extension that describes how the publish-subscribe works. We had only cited the XML example for how you do the subscription. We added how you do both subscription as well as publication. Then, we added a few more sentences in two sections where in the overview we said for the extensibility of other potential pub-sub mechanism because XMPP also may allow for others like XEP-0060 extensions of pub-sub, we needed to allow for that. We added text to address that set of comments. So, that was basically the update that was done in version -01. Thank you Chris for providing feedback on this version. I would like to better understand and we don't have to do it here unless you want to do it with the open mic about what we need to do to make things more clear. With that, any questions? <no>

[Nancy Cam-Winget]: The question as one of the authors is do we feel we are ready for this? Should we do another set of last call comments before Takeshi takes it for publication?

[Dave Waltermire]: It would be useful to get a show of hands to see who has read the draft. <2 people>. It would probably be useful to get more review. Can I get a show of hands of people who would be interested in reviewing the draft? <Stephen, Adam, Henk>. We are trying to move fairly quickly on this so if you could get your reviews in within the next few weeks that would be appreciated. Adam said a few days so you can write that down.

[Nancy Cam-Winget]: The milestone date said for December I think.

[Dave Waltermire]: That will give us some time to address any comments.

[Mike Jones]: Clarification question. Is this the draft that was being referred to in the second discussion earlier this week about the XMPP-Grid?

[Nancy Cam-Winget]: Yes, it is.

[Mike Jones]: Ok, I should probably read it.

[Dave Waltermire]: Thank you Mike.

[Nancy Cam-Winget]: I just realized December is upon us so we can say end of December.

[Dave Waltermire]: Sounds good. Thank you.

#### JSON Binding of IODEF

[Takeshi Takahashi]: Thank you. This is about a JSON binding of IODEF. People are generally in favor of defining a JSON binding. In the discussion, we have discussed the difference between JSON IODEF and IODEFv2 was unclear. Out of this I have two questions. Is it going to be a subject? Or, is it going to be an extension? You should keep in mind that XML and JSON contain the same level of expressiveness. Currently, we have been trying to clarify the difference between the JSON version and the XML version. There was also the local discussion in Japan, where we got feedback. First was that JSON is often used by programmers, it does not need all fields of IODEF. When we want to use all fields, we prefer to use XML. The concept of IODEFv2 is maximum flexibility. The JSON version may have a different concept. The IODEFv2 can carry various data, but, it is not so easy. It is verbose to write in IODEFv2 XML. This is a summary of the differences between the JSON version and IODEFv2. First of all, it is perfectly compatible with IODEFv2. Also, there is no mandatory field for JSON IODEF and JSON IODEF cannot express the type of data that could be expressed in IODEFv2. At the same time, there is some differences when extending for JSON. First, some element names were changed. For example, "Port" and "EventData" were changed to "PortList" and "EventDataList" so people didn't need to look at the schema to determine they were arrays. Some classes that existed only for semantic consistency were omitted including Flow, ApplicationHeader, SignatureData, and IndicatorData. Also, some simplified expressions were permitted such as the combined IP address and port number (e.g. 133.243.22.34:80). Lastly, the profile was prepared which limits the use of IODEF classes for different use cases. This specific profile allowed for the selection of fields to use from IODEFv2 and can also be used to implement restrictions of fields. In this document, we only define our use case, but, other profiles could be developed to support arbitrary user-specific use cases. Provided two examples. First an example that demonstrated an alert using JSON that was directly converted from IODEFv2 in XML where the output is fairly complicated. Second, an example that demonstrated an alert using JSON IODEF. I would like to upload a new version of this to the MILE datatracker as a WG draft. We have done a poll on the mailing list which expressed support for this. A decision still needs to be made though.

[Nancy Cam-Winget]: There is already a version uploaded. An older one.

[Takeshi Takahashi]: There is only an older version uploaded.

[Nancy Cam-Winget]: Ok. So, I would like to get a sense from the room, who has actually read the older draft? <nobody>. Ok. So, Takeshi, I didn't get a show of hands in the room for the old draft so my suggestion would be...go head.

[Takeshi Takahashi]: I think two or three months ago we had this type of discussion on the mailing list that it could be a WG draft. I want to know what is expected from the WG.

[Nancy Cam-Winget]: My suggestion is to go ahead and upload the new version, put it out on the mailing list, and let me know and then as the chair I can ask for review. Once we get some comments, we can post a question in the mailing list whether we can get consensus to adopt it as a WG draft.

[Takeshi Takahashi]: Ok. I will do that and then you will ask the WG whether or not this can be a WG draft. Is this correct?

[Nancy Cam-Winget]: Correct.

[Takeshi Takahashi]: Thank you.

[Nancy Cam-Winget]: Any other comments or questions? <no>. Thank you Takeshi. Ok. That leads to me standing between you and getting to your next activities. Are there any other comments, questions, or issues that we should discuss? Going once, going twice. Alright, thank you for attending and we look forward to Chicago next.